Federal Constitutions, Global Governance, and the Role of Forests in Regulating Climate Change[†]

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Federal systems of government present more difficulties for international treaty formation than perhaps any other form of governance. Federal constitutions that grant subnational governments virtually exclusive regulatory authority over certain subject matter may constrain national governments during international negotiations—a national government that cannot constitutionally bind subnational governments to an international agreement cannot freely arrange its international obligations. While federal nations that grant subnational governments exclusive regulatory control obviously place value on stringent decentralization and the benefits it provides in those regulatory areas, the difficulty lies in striking a balance between global governance and constitutional decentralization in federal systems. Recent scholarship demonstrates that U.S. federalism, for example, may jeopardize international negotiations seeking to utilize certain mechanisms of global forest management to combat climate change, since subnational forest management is a regulatory responsibility reserved for state governments under current constitutional jurisprudence. This Article expands that scholarship by undertaking a comparative constitutional analysis of five other federal systems— Australia, Brazil, Canada, India, and Russia. These nations, along with the United States, are crucial to climate and forest negotiations since they account for 54% of the world's total forest cover. This Article reviews the constitutional allocation of forest regulatory authority between national and subnational governments in these nations to better understand potential complications that federal systems present for global climate governance aimed at forests. The Article concludes that federal

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systems maintaining three key elements within their constitutional structure are most capable of agreeing to an international climate agreement that incorporates forests in a consequential manner—elements that facilitate successful implementation of a treaty on domestic scales while maintaining the recognized benefits of decentralized forest management at the local level: (1) national constitutional primacy over forest management, (2) national sharing of constitutional forest management authority, and (3) adequate forest policy institutional enforcement capacity. The Article also establishes the foundation for further research assessing how the constitutional status quo of federal systems lacking key elements may be adjusted to achieve more effective climate and forest governance.

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INTRODUCTION

Nations concerned about the difficulty of accommodating particular obligations within their constitutional schemes . . . may decline altogether to enter into a treaty that poses a serious risk of conflict with their constitutions. At the domestic level, well-grounded constitutional principles may be insurmountable ¹

Federalism and a spirited foreign policy go ill together.²

Recently, at the United Nations Global Conference on Environmental Governance and Democracy,³ numerous scholars expressed concern over political

^{1.} Edward T. Swaine, *Does Federalism Constrain the Treaty Power?*, 103 COLUM. L. REV. 403, 461–62 (2003).

^{2.} K.C. Wheare, Federal Government 196 (1953).

disconnects among countries engaged in international negotiations on climate change, which is perhaps the most complex and challenging environmental issue of our time. Much of the conference discussion focused on strengthening institutions at various levels of governance to forge political will for action on climate change, either through the creation of new legislation facilitating climate change mitigation and adaptation or through improved enforcement of existing climate change laws.⁴ Political will to create and enforce effective regulatory mechanisms on international and domestic scales is undoubtedly critical to effective global environmental governance, especially in an area as contentious as climate change. Another question, however, necessarily precedes an inquiry into political will—that is, does an adequate legal institutional framework exist within participant countries to ensure that in the presence of political will, if and when it occurs, international treaties can be successfully negotiated and implemented domestically? Without adequate legal institutions to effectively translate global politics into domestic policy, the most robust of international treaties will not be effectively implemented on domestic scales.

Indeed, recent scholarship on international climate negotiations demonstrates how domestic governance limitations—specifically principles of federalism embedded in a country's constitution—may complicate the implementation of a non-self-executing, legally binding climate change treaty that addresses global forest management via certain regulatory mechanisms, or perhaps even prohibit treaty formation altogether. In most nation-states, written constitutions are the ultimate source from which legal institutional strength flows. Countries with

^{3.} An earlier draft of this Article was accepted for presentation at the conference—held at Yale University on September 17–19, 2010, and sponsored by the United Nations Institute for Training and Research. Blake Hudson, *Implications of Constitutional Forest Governance Disparities Among Federal States for International Climate Negotiations*, UNITAR, http://conference.unitar.org/yale/democratic-institutions-and-environmental-sustainability.

^{4.} Conference papers are available online. UNITAR, http://conference.unitar.org/yale/conference-papers.

^{5.} See Blake Hudson & Erika Weinthal, Seeing the Global Forest for the Trees: How U.S. Federalism Can Coexist with Global Governance of Forests, 1 J. NAT. RESOURCES POL'Y RES. 353 (2009) [hereinafter Hudson I]; Blake Hudson, Climate Change, Forests, and Federalism: Seeing the Treaty for the Trees, 82 U. Colo. L. Rev. 363 (2011) [hereinafter Hudson II]. This scholarship has focused on the debate among American constitutional law scholars regarding the scope of the U.S. federal government's treaty power, the history of the United States invoking federalism in order to inhibit treaty formation and participation, and the constitutional and judicial deference afforded to state and local governments—even in the presence of an international treaty—in the area of private property land-use regulation, including forest management regulations. Due to the great uncertainty surrounding the question of whether federalism limits the U.S. federal government's ability to enter into and implement a legally binding treaty that would require direct regulation of forest management activities via prescriptive mechanisms, this scholarship suggested that as long as the current constitutional status quo remains, future treaties aimed at forest management should rely on voluntary, market-based mechanisms to facilitate U.S. participation and avoid domestic judicial challenges to treaty implementation by subnational units of government and private property owners in the United States.

^{6.} See generally Martin Edelman, Written Constitutions, Democracy and Judicial Interpretation: The Hobgoblin of Judicial Activism, 68 Alb. L. Rev. 585 (2005); see also

federal systems of government, like the United States, pose particularly acute challenges to a variety of international negotiations⁷ because federal systems are constitutionally decentralized⁸ and regulatory authority over treaty subject matter may be divided between the national and subnational units of government. Thus, national governments in federal systems may be constrained in treaty negotiations by subnational governments that challenge domestic treaty implementation as outside the scope of the national government's constitutional authority.

Take, for example, the role of the United States in climate change negotiations related to global forest management. The international community is increasingly focused on carbon sequestration via improved forest management as perhaps the most effective tool in battling climate change, 9 and "realization of the significance of climate change impacts of greenhouse gas emissions from deforestation and forest degradation has brought renewed impetus to efforts to conserve and better manage forests globally." 10 The global benefits of responsible local forest management are enormous, as approximately 20% of annual global carbon emissions result from forest loss and degradation. 11 This is more carbon than is emitted by the transportation sector each year. 12 Indeed, sustainable forest

Ruth Bader Ginsburg, An Overview of Court Review for Constitutionality in the United States, 57 La. L. Rev. 1019, 1025 (1997).

- 7. Such negotiations include those related to human rights, criminal law and punishment, commerce and trade, and the environment. Curtis A. Bradley, *The Treaty Power and American Federalism*, 97 MICH. L. REV. 390, 402–08 (1998).
 - 8. Scholars have stated that,

federations use the principle of *constitutional non-centralization* rather than decentralization.

... In other words, when independent states decide to create a federation and a federal system of government, they confer, generally through a constitution, certain specific responsibilities and authorities to the federal government in the interest of all states. . . . [F]or these reasons, use of the term *decentralized* is somewhat awkward in the case of federal governments.

Hans M. Gregersen, Arnoldo Contreras-Hermosilla, Andy White & Lauren Phillips, *Forest Governance in Federal Systems: An Overview of Experiences and Implications for Decentralization, in* THE POLITICS OF DECENTRALIZATION: FORESTS, POWER AND PEOPLE 13, 14–15 (Carol J. Pierce Colfer & Doris Capistrano eds., 2005) (emphasis in original).

- 9. See infra notes 34–35 and accompanying text.
- 10. CONSTANCE L. McDermott, Benjamin Cashore & Peter Kanowski, Global Environmental Forest Policies: An International Comparison 4 (2010).
 - 11. *Id.* at 6.
- 12. See Erin C. Myers, Res. for the Future, Policies to Reduce Emissions from DEFORESTATION AND DEGRADATION (REDD) IN TROPICAL FORESTS: AN EXAMINATION OF THE ISSUES FACING THE INCORPORATION OF REDD INTO MARKET-BASED CLIMATE POLICIES 4 (2007), available at http://www.rff.org/documents/RFF-DP-07-50.pdf. For further information on the process of carbon sequestration, see Kenneth L. Denman & Guy Brasseur, Couplings Between Changes in the Climate System and Biogeochemistry, in CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS, CONTRIBUTION OF WORKING GROUP I TO THE FOURTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE **CHANGE** 500 (Susan Solomon et al. eds.. 2007). available http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-chapter7.pdf. In 2007, forests sequestered approximately 8% of total U.S. carbon emissions. ERIC M. WHITE & RALPH J. ALIG, PUBLIC AND PRIVATE FOREST OWNERSHIP IN THE CONTEXT OF CARBON

management provides a variety of benefits along a spectrum from local to global scales. Local communities that effectively manage forest resources gain economic and environmental goods and services in the form of timber and food production, clean water, clean air, and biodiversity. In turn, the global community gains sequestration of carbon, as governments seek to battle the effects of climate change by including forest carbon in the ever-growing carbon credit market. ¹³ Ultimately, global benefits derived from forests cannot materialize without the aggregation of responsible national and subnational forest management, demonstrating the inextricability of localized resource management decisions from global concerns and impacts. ¹⁴

Though participation of the United States is an important component to achieving these global benefits, the United States's role in capitalizing on forest management to address climate change is complicated by its federalist form of governance. U.S. regulatory authority over forest management is constitutionally divided between the federal and state governments, with state governments responsible for regulating the nearly 65% of "local" U.S. forests that are in either state ownership (approximately 5%) or private ownership (approximately 60%). 15 Thus, even if the national government wished to obligate the United States to certain types of forest management requirements within an international climate treaty, it may arguably only do so on the 35% of nationally owned forests subject to its constitutional control. Consequently, the national government would be unable to effectively implement the treaty on nearly two-thirds of the United States's forested lands, as any congressional implementing legislation would likely be challenged by state governments and private property owners as beyond Congress's powers and as intruding upon a regulatory role constitutionally reserved to state governments. Thus, the United States would be in violation of its international obligations. By contrast, nonfederal nation-states with centralized, or "unitary," forms of government may act without legal constraint during international climate negotiations—the lack of exclusive areas of subnational constitutional authority in

SEQUESTRATION AND BIOENERGY FEEDSTOCK PRODUCTION—A BRIEFING PAPER ON EXISTING RESEARCH AND RESEARCH NEEDS 9 (2010), available at http://www.fsl.orst.edu/lulcd/Publicationsalpha_files/White_Public_Private_Briefing.pdf.

14. It has been noted that,

[f]orests are profoundly local. . . .

At the same time, forests are truly global. . . .

. . . .

The challenge is to find a governance framework that can balance the various local, national and global interests related to forests. Everyone agrees that local groups should be allowed to come up with solutions that reflect their own needs and circumstances; but regional, national and global concerns must also be addressed.

Wahjudi Wardojo, *Foreword* to THE POLITICS OF DECENTRALIZATION: FORESTS, POWER AND PEOPLE, *supra* note 8, at ix, ix.

15. U.N. Env't Programme, Global Environment Outlook 3: Past, Present and Future Perspectives 110 (2002), *available at* http://www.unep.org/geo/GEO3/english/pdf.htm (follow "Forests" hyperlink).

^{13.} Manish Bapna, *Forests, Climate Change and the Challenge of REDD*, WORLD RESOURCES INST., http://www.wri.org/stories/2010/03/forests-climate-change-and-challenge-redd; *see also* MYERS, *supra* note 12, at 4.

these countries allows central governments to more freely obligate their respective nations to the dictates of a legally binding treaty. ¹⁶

Despite being overlooked by climate change scholars, federal constitutional limitations have potentially significant implications for global climate change or other negotiations related to forests. Though federal systems of government comprise only approximately 13% of the world's governments, they maintain control over 70 to 80% of the world's forests. 17 As a result, the domestic constitutional governance structures of federal systems controlling important forest resources should be assessed to better understand potential complications that may arise during international climate negotiations related to forests. As the threat of climate change becomes more apparent and the resulting law and policy responses adjust over time, it will be crucial that world governments maintain, and are able to effectively utilize, every legal and policy tool at their disposal. A collaborative international response to climate change can certainly take many forms, ranging from individualized action by single nations, to transnational forms, ¹⁸ to a legally binding global treaty. The utilization of a binding treaty, however, may be diminished if constitutionally decentralized federal systems controlling important forest resources are unable to fully participate.

In addition to the United States, five federal systems in particular—Australia, Brazil, Canada, India, and Russia—account for 54% of the world's total forest cover, ¹⁹ and are thus vitally important to climate negotiations. Though a handful of

^{16. &}quot;Unitary" systems of government "may have sub-national levels of governments; but these are not constitutionally empowered to make decisions on major government services and functions; rather, they are subordinate units." Gregersen et al., *supra* note 8, at 15. These subordinate units are intended to "balance the burden of governance." Ian Ferguson & Cherukat Chandrasekharan, *Paths and Pitfalls of Decentralization for Sustainable Forest Management: Experiences of the Asia Pacific Region, in* The Politics of Decentralization: Forests, Power and People, *supra* note 8, at 63, 65. To be clear, national governments in unitary systems may certainly be *politically* thwarted by subnational government or interest group influence, but unitary governments maintain the *legal* authority to act if and when they politically choose to do so. In federal systems, on the other hand, even in the presence of national political will, any one subnational actor may challenge a national act as unconstitutional and may succeed in having it invalidated.

^{17.} Arnoldo Contreras-Hermosilla, Hans M. Gregersen & Andy White, Ctr. for Int'l Forestry Res., Forest Governance in Countries with Federal Systems of Government: Lessons for Decentralization 1 (2008), available at http://www.cifor.cgiar.org/publications/pdf_files/GovBrief/GovBrief0739E.pdf. There are approximately 167 unitary systems of government, while there are only 26 federal systems of government. Federalism by Country, F. of Federations, http://www.forumfed.org/en/federalism/by_country/index.php.

^{18.} These may include voluntary or other arrangements between groups of nations or nongovernmental organizations.

^{19.} Of the world's approximately 4 billion hectares of forest, Australia maintains 165 million hectares; Brazil, 493 million hectares; Canada, 310 million hectares; Russia, 809 million hectares; and the United States, 302 million hectares. Jacek P. Siry, Frederick W. Cubbage, & David H. Newman, XIII World Forestry Cong., Global Forest Ownership: Implications for Forest Production, Management, and Protection 3 (2009), available at http://www.pefc.org/images/stories/documents/external/global_forest

scholars have provided descriptive, comparative analyses of the effects of resource *management* decentralization in federal nation-states, ²⁰ scholars have failed to adequately assess the potential limiting effects of federal nation-state domestic constitutional constraints on international climate negotiations. Regardless of past and present *political* impacts on climate treaty formation, such as insufficient domestic political will or political disagreements between the developed and developing world, ²¹ such an assessment is clearly warranted to determine whether a sufficient *legal* institutional framework exists in federal systems to facilitate the full range of market-based *and* regulatory options within international agreements that incorporate forests. If the constitutional framework in a federal system limits the national government's authority to effectively implement a treaty on a subject matter reserved to subnational governments, a more important question will be how to craft constitutional approaches in these systems that best facilitate international agreement.

An equally important question is how to balance global climate and forest governance with the benefits that decentralized forest management provides on local scales. Though certain federal systems, like the United States, present challenges for national and international policy *up the ladder* of forest resource governance, those same systems may more readily facilitate benefits on local scales *down the ladder*. Indeed, constitutionally decentralized federal systems provide a variety of governance benefits for local resource managers. Balancing the provision of global forest goods and services (such as climate change mitigation) via the implementation of international agreements with the provision of national and local goods via sustainable decentralized forest policy is a particularly challenging task within federal systems.

This Article uses the lens of climate change, and the role of forest management in facilitating climate change solutions, to explore the realities of balancing domestic constitutional federalism with both global environmental governance and sustainable national and local forest management. The Article does so by assessing how the division of regulatory authority over forests between national and subnational governments in the above federal systems may affect global climate negotiations. More specifically, the Article analyzes whether—and to what degree—these federal countries maintain adequate constitutional capacity to enter into a viable climate treaty including forest management, to successfully implement such a treaty domestically, and to do so in a way most conducive to capturing the benefits of decentralized forest policy. Included in this assessment is a review of the split in public and private ownership of forests, which is of critical importance because different levels of government in federal systems maintain constitutional

_ownership_FD.pdf. India maintains seventy-seven million hectares. INDIAN INST. OF FOREST MGMT., NATIONAL FOREST POLICY REVIEW: INDIA 111, available at ftp://ftp.fao.org/docrep/fao/005/AC921E/AC921E04.pdf.

^{20.} See generally Contreras-Hermosilla et al., supra note 17; Hans Gregersen, Arnoldo Contreras-Hermosilla, Andy White, & Lauren Phillips, Ctr. for Int'l Forestry Res., Forest Governance in Federal Systems: An Overview of Experiences and Implications for Decentralization (2004), available at http://www.cifor.cgiar.org/publications/pdf_files/interlaken/Interlaken_pre-paper.pdf; The Politics of Decentralization: Forests, Power and People, supra note 8.

^{21.} See infra note 27 and accompanying text.

^{22.} See infra note 96 and accompanying text.

regulatory authority over forests depending on whether the forests are publicly or privately owned. The split in national/subnational authority and public/private forest ownership can be represented as two axes of disparity among federal systems in the area of forest management, with different federal systems falling into different quadrants. Figure 1 below provides a visualization of the widely divergent positions from which federal nation-states approach international climate negotiations aimed at forests.

Figure 1 Greater Public Ownership of Forests India 🔳 Canada Russia Australia National Subnational Constitutional Constitutional Treaty Primacy over Primacy over Decentralized Decentralized Forest Policy Forest Policy United States Brazil

Greater Private Ownership of Forests

Where a federal system falls along these axes affects its *legal* domestic treaty implementation capabilities, as well as the *political* will it maintains to negotiate a treaty in the first instance. As explained below, the U.S. and Canadian national governments have extremely limited control over direct forest management activities on both state/provincial forestlands and private forestlands because "constitutional primacy" over decentralized forest policy remains with the subnational states or provinces. While these systems obviously place value on constitutionally decentralized forest governance, their chosen constitutional structure makes it very difficult to bind subnational governments to specific forest management directives via international treaty. By contrast, the Brazilian and Russian national governments maintain far more authority over forest resources relative to subnational governments, thus giving those countries what may be termed "national constitutional primacy" over decentralized forest policy. Furthermore, 75% of Brazil's forests, 60% of the United States's forests, and 26% of Australia's forests are privately owned, whereas 93% of forests are publicly owned in Canada, 92% in Russia, and 97% in India 23—further complicating global forest governance negotiations among federal systems. Ultimately, because different levels of government, with different levels of constitutional authority, may directly regulate different categories of forest ownership, federalism and propertyrights complications have the potential to adversely impact future climate negotiations among federal systems. This Article aims to identify potential federalism-based legal impediments to future climate negotiations by analyzing the constitutional structures of these federal nation-states—a key step toward assessing how to craft constitutional approaches in federal systems that best facilitate both international agreement on climate and effective domestic forest policy.

The Article proceeds in four parts. First, in order to explain the foundational research upon which this Article builds and establish the context for subsequent comparative analysis, Part I summarizes prior research on domestic constitutional constraints on international climate negotiations arising out of the U.S. constitutional structure. Part II introduces and analyzes three key elements of federal constitutional structure that most readily facilitate the formation of an international climate agreement aimed at forest management activities, its successful implementation at the domestic level, and preservation of the benefits of decentralized forest policy. In other words, the presence of all three elements allows federal systems to strike a difficult balance given the realities of federalism, international negotiations on forests, and the need to sustainably manage forest resources across scales. These elements are: (1) national government constitutional primacy over national and subnational forest policy, (2) national government sharing of its constitutional authority over forest policy with subnational units of government, and (3) forest policy institutional enforcement capacity.²⁴

Part III next surveys and provides a comparative analysis of the constitutional division of forest regulatory authority between national and subnational governments and the allocation of forest ownership in Australia, Brazil, Canada, India, and Russia (with comparative reference to the United States)—thus describing which key elements discussed in Part II are currently retained by these systems. ²⁵ Part IV summarizes the findings presented in Part III, explaining that each federal system analyzed maintains some combination of these three elements and that those with all three provide the constitutional framework most conducive to negotiating and successfully implementing an international climate treaty aimed at forests, while also capturing the benefits of decentralized federal forest policy. Part IV also situates these federal systems within a recently articulated policy

^{24.} Elements one and three are legal in nature, arising out of a federal system's constitutional order. Systems maintaining these two elements are most capable of entering into and successfully implementing an international agreement. The second element is political in nature, and federal systems maintaining this element most readily facilitate the well-recognized benefits of decentralized forest policy—which unsurprisingly track the recognized benefits of having a federal system of government in the first place.

^{25.} It was not within the scope of this Article to assess every federal system controlling important forest resources. These five countries, however, along with the United States, account for 54% of the world's total forest cover. SIRY ET AL., *supra* note 19 and accompanying text. Nonetheless, the findings, conclusions, and implications of the research presented in this Article are equally applicable to other federal systems, and it is my hope that scholars will undertake full assessment of other federal systems controlling forest resources.

formulation and implementation matrix, which provides a framework for analyzing the consequences of federal systems lacking key elements, with both domestic and international implications. This Article concludes by suggesting further research aimed at assessing solutions to the absence of key elements in certain federal systems.

I. IMPACTS OF U.S. FEDERALISM ON INTERNATIONAL CLIMATE AND FOREST NEGOTIATIONS

Though the international community has increasingly focused on global standardization of forest management practices, particularly regarding the role of forests in combating climate change, efforts over the past two decades to achieve harmonization of national and local forest practices within a legally binding international treaty have failed.²⁶ This failure is in part due to political disconnects

26. Since the late 1980s, countries supporting global governance of forests have made numerous attempts to negotiate a legally binding international forest treaty, though each has failed. Various international fora have facilitated these negotiations: the 1992 U.N. Conference on the Environment and Development (UNCED) in Rio de Janeiro; four sessions of the Intergovernmental Panel on Forests (IPF) between 1995 and 1997; four rounds of the Intergovernmental Forum on Forests (IFF) between 1997 and 2000; and most recently, numerous sessions of the United Nations Forum on Forests (UNFF) in the 2000s. Radoslav S. Dimitrov, Detlef F. Sprinz, Gerald M. DiGiusto & Alexander Kelle, *International Nonregimes: A Research Agenda*, 9 INT'L STUD. REV. 230, 243 (2007); accord Deborah S. Davenport & Peter Wood, *Finding the Way Forward for the International Arrangement on Forests: UNFF-5*, -6 and -7, 15 REV. EUR. COMMUNITY & INT'L ENVTL. L. 316, 316 (2006); S. Guéneau & P. Tozzi, *Towards the Privatization of Global Forest Governance?*, 10 INT'L FORESTRY REV. 550, 552 (2008). The timeline for post-1992 forest negotiations has been described as follows:

International forest policy negotiations have often been characterized by political entrenchment

. . . Since the failure at the 1992 [UNCED] in Rio de Janeiro to achieve a legally binding forest convention, several fora have been developed in order to allow international forest policy discussions to continue

. . . [But a] convention specifically addressing forests eluded consensus. . . . [T]he [IPF] was established as an expert body under the UN Commission on Sustainable Development (CSD), with a 2-year work programme intended to combat deforestation and forest degradation. The IPF . . . led to the creation of the [IFF] in 1997 The UNFF was then formed, with a plan of action that centered on implementation of the IPF/IFF proposals for action . . . [T]he creation of the UNFF had less to do with monitoring the implementation of the proposals for action than it had to do with compromise: the need to counter the disappointment of some at the lack of an agreement to negotiate a forest convention with the creation of a new, more permanent forum with a substantially higher level of political authority.

Davenport & Wood, *supra*, at 316–17. The 2007 UNFF talks did result in a "Non-legally Binding Authoritative Statement of Principles for a Global Consensus on Management, Conservation, and Sustainable Development of All Types of Forests," which sought to promote sustainable forest management worldwide and international cooperation on global

between the developed and developing worlds, with the developing world expressing skepticism over attempted developed country efforts to curb the destruction of tropical rainforest. However, scholars have specifically cited the United States's unwillingness to unequivocally support an international agreement as the primary factor driving the failure of global climate and forest negotiations. U.S. intransigence is especially significant because the United States is widely considered to be the most influential country in global environmental governance negotiations, and thus U.S. participation is crucial to the success of any global environmental treaty. ²⁹

U.S. leadership is especially crucial in the case of climate change negotiations directed at global forest management. The United States is one of the greatest emitters of atmospheric carbon in the world, maintaining the second highest total and per capita carbon emissions as of 2008. The United States also maintains the fourth-largest forest estate of any country on the globe, as 8% of the world's forests are in the United States. Scholars have argued that, "most observers believe that a key element for a successful set of [climate] negotiations . . . is the adoption by the United States of a set of binding limits for U.S. greenhouse gas emissions . . . "32 Yet the United States has failed to set such limits. In fact, despite the key role the United States plays in global environmental governance generally, it participates in only one-third of existing international environmental agreements, failing to either sign or ratify many significant treaties. Importantly, the United States has refused to ratify the current guiding climate change treaty, the Kyoto Protocol. 33

forest issues. G.A. Res. 62/98, at 2, U.N. Doc. A/RES/62/98 (Jan. 31, 2008), available at http://www.fao.org/forestry/14717-03d86aa8c1a7426cf69bf9e2f5023bb12.pdf. Some scholars, however, claim that the instrument "looks unlikely to achieve any real consolidation of global forest governance." Guéneau & Tozzi , *supra*, at 552.

- 27. The developing world has viewed a global forest treaty as a means for the developed world to raise trade barriers and to engage in "forest colonialism" by obligating the developing world to take economically detrimental action to protect tropical forests while refusing to enforce the same regulations on temperate and boreal forests. *See* Radoslav S. Dimitrov, *Knowledge, Power, and Interests in Environmental Regime Formation*, 47 INT'L STUD. Q. 123, 135 (2003).
- 28. See Deborah S. Davenport, An Alternative Explanation for the Failure of the UNCED Forest Negotiations, GLOBAL ENVTL. POL., Feb. 2005, at 105; see also Radoslav S. Dimitrov, Hostage to Norms: States, Institutions and Global Forest Politics, GLOBAL ENVTL. POL., Nov. 2005, at 1.
 - 29. See Davenport, supra note 28; Dimitrov, supra note 27.
- 30. Each Country's Share of CO2 Emissions, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/global_warming/science_and_impacts/science/each-countrys-share-of-co2.html.
- 31. Gerald A. Rose, Douglas W. MacCleery, Ted L. Lorensen, Gary Lettman, David C. Zumeta, Mike Carroll, Timothy C. Boyce & Bruce Springer, *Forest Resources Decision-Making in the US, in* THE POLITICS OF DECENTRALIZATION: FORESTS, POWER AND PEOPLE, *supra* note 8, at 238, 238.
- 32. Christophe A.G. Tulou, Michael L. Goo, Patrick A. Parenteau & John Costenbader, *Climate Change and the Marine Environment, in Ocean and Coastal Law and Policy* 571, 586 (Donald C. Baur, Tim Eichenberg & Michael Sutton eds., 2008).
- 33. See Katrina L. Fischer, Harnessing the Treaty Power in Support of Environmental Regulation of Activities that Don't "Substantially Affect Interstate Commerce": Recognizing the Realities of the New Federalism, 22 VA. ENVIL. LJ. 167, 199 (2004). The Kyoto

Despite the failure of the United States to take a leading role in past climate and forest talks, the international community-including the UNFF and the United Nations Framework Convention on Climate Change (UNFCCC)—continues to move toward harnessing global forest management as a means of combating climate change, primarily through the inclusion of market-based incentives to achieve "Reduced Emissions from Deforestation and Forest Degradation" (REDD).³⁴ Despite high hopes, a post-Kyoto climate agreement failed to materialize during Climate Change Conference number fifteen (COP-15) in Copenhagen at the end of 2009. While there is increasing inertia toward direct inclusion of forest management within any future climate agreement that may arise, 35 the politics of global climate change negotiations continue to be contentious within the United States. This contentiousness is perhaps best evidenced by the United States's persistent failure to pass domestic climate change legislation.³⁶ With the 2010 midterm congressional elections resulting in the largest power-shift in the House of Representatives since 1948—ushering in representatives opposed to climate cap and trade—the politics of regulatory action on climate change is unlikely to improve in the near term.³⁷

Protocol (adopted in 1997 and entering into force in 2005), is a multilateral environmental agreement that assigned binding carbon reduction targets and timeframes to "Annex I," or industrialized nations, as well as general commitments for all signatory nations. K. Levin, C. McDermott & B. Cashore, *The Climate Regime as Global Forest Governance: Can Reduced Emissions from Deforestation and Forest Degradation (REDD) Initiatives Pass a 'Dual Effectiveness' Test?*, 10 INT'L FORESTRY REV. 538, 543–44 (2008). The United States signed the Kyoto Protocol but the U.S. Congress never ratified it. Fischer, *supra*, at 199.

- 34. The UNFF, which concluded its 8th session in May 2009, is the primary forum for what may be termed "stand-alone" forest negotiations. Though these negotiations are outside the context of direct climate negotiations, they seek to develop a role for forests in combating climate change, promote sustainable forestry, and preserve forest ecosystem services. Additionally, the UNFCCC is increasingly discussing methods of addressing global forest management via a post-Kyoto climate treaty. See A. Angelsen, REDD Models and Baselines, 10 INT'L FORESTRY REV. 465 (2008); T. Johns, F. Merry, C. Stickler, D. Nepstad, N. LaPorte & S. Goetz, A Three-Fund Approach to Incorporating Government, Public and Private Forest Stewards into a REDD Funding Mechanism, 10 INT'L FORESTRY REV. 458 (2008); A. Karsenty, S. Guéneau, D. Capistrano, B. Singer & J-L. Peyron, Summary of the Proceedings of the International Workshop "The International Regime, Avoided Deforestation and the Evolution of Public and Private Policies Towards Forests in Developing Countries" Held in Paris, 21-23rd November 2007, 10 INT'L FORESTRY REV. 424 (2008); Levin et al., supra note 33.
 - 35. See Levin et al., supra note 33, at 539.
- 36. See American Power Act, S. 1733, 111th Cong. (2010) (Kerry-Lieberman Bill); American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009) (Waxman-Markey Bill); Lieberman-Warner Climate Security Act of 2007, S. 2191, 110th Cong. (2007); Dingell-Boucher Cap-and-Trade Bill, INSTITUTE FOR ENERGY RESEARCH, http://www.instituteforenergyresearch.org/2008/10/07/dingell-boucher-cap-and-trade-bill/.
- 37. See Quinn Bowman & Chris Amico, Congress Loses Hundreds of Years of Experience—but Majority of Incumbents Stick Around, PBS (Nov. 5, 2010), http://www.pbs.org/newshour/rundown/2010/11/congress-loses-hundreds-of-years-of-experience—but-vast-majority-of-incumbents-stick-around.html; Renee Schoof, With GOP in Charge of House, Environmental Policy Will Shift, McClatchy (Nov. 3, 2010), http://www.mcclatchydc.com/2010/11/03/103149/with-gop-in-charge-of-house-

But, what will happen if the United States decides to take domestic and international action on carbon? What if, in the future, the international community seeks to harness global forest management to combat climate change through more aggressive mechanisms than market-based incentives? Even if the United States were to gain the *political* will to tackle climate change in such a manner in the future, the precursor to this Article demonstrated that the U.S. Constitution establishes potential *legal* restrictions on its ability to enter into certain types of international agreements addressing climate change—specifically ones that seek to implement restrictions on land-use activities traditionally subject to state and local government regulatory authority, such as private forest management. In other words, the constitutional division of regulatory authority between the federal and state governments—that is, federalism—may act as a restraint on Congress's Article II treaty power by limiting Congress's ability to implement treaties through the passage of federal legislation that would intrude on a regulatory role reserved to the states under the U.S. Constitution.

Private land-use regulation is just such a role, ³⁸ as state governments maintain the primary responsibility to regulate land use under their authority to exercise the "police power" for protection of the "general welfare." ³⁹ Some have argued that the Tenth Amendment of the Constitution places limits on Congress's regulatory authority "in 'traditional areas of state and local authority,' such as land use"

environmental.html.

38. This assertion is made in the context of a recently developed theory of "Bimodal Federalism," which seeks to highlight a disconnect in the scholarly literature regarding how U.S. federalism may operate or should normatively operate regarding some regulatory subject matter, and how it actually operates regarding other subject matter. See Blake Hudson, Reconstituting Land-Use Federalism to Address Transitory and Perpetual Disasters: The Bimodal Federalism Framework, 2011 BYU L. Rev. 1991. This disconnect revolves around two different conceptions of how federalism operates, or normatively should operate, in the United States today—"dynamic federalism" and "dual federalism." Proponents of dual federalism posit that "the states and the federal government inhabit[] mutually exclusive spheres of power." Kirsten H. Engel, Harnessing the Benefits of Dynamic Federalism in Environmental Law, 56 EMORY L.J. 159, 175 (2006). Proponents of dynamic federalism, meanwhile,

reject[] any conception of federalism that separates federal and state authority under the dualist notion that the states need a sphere of authority protected from the influence of the federal government" and posit that "federal and state governments function as alternative centers of power and *any matter* is presumptively within the authority of both the federal and the state governments.

Id. at 176 (emphasis added). Yet, neither of these theories captures the complete descriptive picture of U.S. federalism today. Dynamic federalism may certainly be claimed as the status quo on many regulatory subject matters, and we may be in the midst of transition towards dynamic federalism on other subject matter. Yet remnants of dual federalism remain. Direct land-use regulatory authority, including private forest management, is one such remnant. The federal and state governments, in addition to the judiciary, operate as if there are separate spheres of governance, and the federal government is currently perceived as having no constitutional authority to prescriptively direct subnational land-use planning or private forest management. For further analysis on these points within the Bimodal Federalism framework, see Hudson, *supra*.

- 39. See Mugler v. Kansas, 123 U.S. 623 (1887).
- 40. James R. May, Constitutional Law and the Future of Natural Resource Protection,

These scholars have noted that "[t]he weight of legal and political opinion holds that this allocation of power in [the United States] leaves the states in charge of regulating how private land is used,"41 and that "[I]and use law has always been a creature of state and local law." The seminal land use regulatory case of Euclid v. Ambler Realty⁴³ has been described as a "sweeping paean to the supremacy of state regulation over private property,"44 while the U.S. Supreme Court has recognized "the States' traditional and primary power over land . . . use," 45 and that "[r]egulation of land use . . . is a quintessential state and local power." 46

As noted above, domestic constitutional constraints such as state control over land-use regulation have important implications for international negotiations. Even in the absence of political complications that negatively impacted past climate negotiations, the United States, as well as other countries with which it might negotiate, may not be willing to enter into certain types of treaties addressing climate and forests in the presence of domestic constitutional limitations since a treaty that may not be legally implemented domestically will not be effective. Indeed, the United States has invoked federalism in past treaty negotiations on a number of subjects in order to avoid global agreements that might restrict traditional state regulatory authority—whether the United States had legitimate constitutional bases for doing so has become the subject of much debate among constitutional law scholars. 47 It seems clear that, as a political matter, the U.S.

in The Evolution of Natural Resources Law and Policy 124, 132 (Lawrence J. MacDonnell & Sarah F. Bates eds., 2010).

- 41. JOHN R. NOLAN, PATRICIA E. SALKIN & MORTON GITELMAN, LAND USE AND COMMUNITY DEVELOPMENT 17 (7th ed. 2008).
- 42. Marci A. Hamilton, Federalism and the Public Good: The True Story Behind the Religious Land Use and Institutionalized Persons Act, 78 IND. L.J. 311, 335 (2003).
 - 43. 272 U.S. 365 (1926).
- 44. PAUL GOLDSTEIN & BARTON H. THOMPSON, JR., PROPERTY LAW: OWNERSHIP, USE, AND CONSERVATION 967 (2006).
- 45. Solid Waste Agency of N. Cook Cnty. v. Army Corps of Eng'rs, 531 U.S. 159, 174 (2001) (Stevens, J., dissenting) (citing Hess v. Port Auth. Trans-Hudson Corp., 513 U.S. 30, 44 (1994) ("[R]egulation of land use [is] a function traditionally performed by local governments.")).
- 46. Rapanos v. United States, 547 U.S. 715, 738 (2006) (emphasis added); see also FERC v. Mississippi, 456 U.S. 742, 768 n.30 (1982) ("[R]egulation of land use is perhaps the quintessential state activity.") (emphasis added). For a more general discussion distinguishing the permissible, tangential influencing effects of U.S. federal statutes on state regulation of forests from potentially impermissible federal interference with primary state authority over forest management, see Hudson II, supra note 5.
- 47. Professor Bradley has noted that "in a number of instances in the late nineteenth and early twentieth centuries, U.S. officials declined to enter into negotiations concerning private international law treaties because of a concern that the treaties would infringe on the reserved powers of the states." Curtis A. Bradley, The Treaty Power and American Federalism, Part II, 99 MICH. L. REV. 98, 131-32 (2000) (citing Kurt H. Nadelmann, Ignored State Interests: The Federal Government and International Efforts to Unify Rules of Private Law, 102 U. PA. L. REV. 323 (1954); see also HAROLD W. STOKE, THE FOREIGN RELATIONS OF THE FEDERAL STATE 187-88 (1931). Additionally, in the past, the United States has invoked federalism and states' rights to avoid international treaties regulating labor conditions. Bradley, supra, at 132. Perceived federalism limits on the U.S. government have also been credited with reducing the United States's bargaining power during

Congress could certainly test the waters of federal regulatory authority—under the Commerce Clause or some other enumerated power—and seek to regulate subject matters previously regulated almost exclusively by state governments (an example being private forest management). Yet in the United States it seems that "legal perception becomes political reality," as the government politically acts as if its hands are tied due to perceived legal constraints.

As a general matter, U.S. constitutional law scholars are in heated disagreement as to whether constitutional federalism limitations restrain the treaty power established in Article II of the U.S. Constitution.⁴⁹ In one camp are scholars asserting that the "new federalism" ⁵⁰ established by recent U.S. Supreme Court decisions⁵¹ confirms the existence of federalism restraints on the United States's ability to implement international treaties requiring the passage of federal legislation that would be unconstitutional if passed in the absence of a treaty—such as legislation that intrudes into regulatory areas traditionally reserved for the states under the Constitution.⁵² This camp stands for the proposition that the treaty power should be subject to the same federalism limitations that apply to Congress's other sources of legislative authority, such as the Commerce Clause, because "the federal government should not be able to use the treaty power . . . to create domestic law that could not be created by Congress" in the absence of a treaty.⁵³ This view follows from Jeffersonian notions of the treaty power's scope, as Thomas Jefferson himself wrote that "[the treaty power] must have meant to except out of these the rights reserved to the states; for surely the President and Senate cannot do by treaty

international negotiations, as the United States has sought both treaty exemptions to reduce state obligations, and concessions for states in domestic implementation. *See* Swaine, *supra* note 1, at 408–10. Examples include the United States's direct opposition to the Convention on the Rights of the Child, treaty exemptions for the states with a variety of human rights treaties and the Agreement on Government Procurement, and concessions to the states in domestic implementation of trade matters like the Uruguay Round Agreements Act. *Id.*

- 48. Hudson, *supra* note 38, at 2048.
- 49. For a thorough discussion of this disagreement and its implications, see Hudson II, *supra* note 5, at 405–13.
 - 50. See generally Swaine, supra note 1.
- 51. See United States v. Morrison, 529 U.S. 598 (2000); Printz v. United States, 521 U.S. 898 (1997); City of Boerne v. Flores, 521 U.S. 507 (1997); United States v. Lopez, 514 U.S. 549 (1995); New York v. United States, 505 U.S. 144 (1992).
- 52. See Bradley, supra note 7; Bradley, supra note 47; Fischer, supra note 33; Duncan B. Hollis, Executive Federalism: Forging New Federalist Constraints on the Treaty Power, 79 S. CAL. L. REV. 1327 (2006); Nicholas Quinn Rosenkranz, Executing the Treaty Power, 118 HARV. L. REV. 1867 (2005); Swaine, supra note 1.
 - 53. See Bradley, supra note 7, at 450. Bradley stated that, [u]nder this approach, the treaty power would not confer any additional regulatory powers on the federal government, just the power to bind the United States on the international plane. Thus, for example, it could not be used to resurrect legislation determined by the Supreme Court to be beyond Congress's legislative powers, such as the legislation at issue in the recent New York, Lopez, Boerne, and Printz decisions.

Id. at 456. Bradley clarifies, however, that his argument "is simply that *if* federalism is to be the subject of judicial protection—as the current Supreme Court appears to believe—there is no justification for giving the treaty power special immunity from such protection." *Id.* at 394 (emphasis in original).

what the whole government is interdicted from doing in any way."⁵⁴ The implications of this view, of course, are that federalism limits "might leave the United States with a gap between its international treaty obligations and its ability to implement them"⁵⁵ Even so, constitutional law scholars raise a compelling argument that "[i]f the national government is indeed supposed to be a creature of limited authority, shouldn't the treaty power enjoy boundaries just like any other?"⁵⁶

Another camp of constitutional law scholars articulate the "nationalist" perspective, asserting that for domestic legislation implemented pursuant to an international treaty, the national government may claim regulatory authority even over subject matter traditionally regulated by state governments that would otherwise be beyond the reach of the national government in the absence of a treaty. 57 This camp views the treaty power as an independent power delegated to the national government, as is the case with the Commerce Clause and other sources of federal authority. In this way, "nationalists" argue that just as there are no Tenth Amendment powers "reserved" exclusively for the states for activities that are found to constitute "commerce between the states" under the Commerce Clause, there are no Tenth Amendment powers "reserved" exclusively for the states for activities subject to an international treaty.⁵⁸ For non-self-executing treaties that require domestic legislation that might otherwise be subject to federalism limitations, such as legislation outside the scope of the Commerce Clause or some other enumerated federal power, nationalists invoke the Necessary and Proper Clause, asserting that "it is quite clear that Congress has the power to adopt legislation executing the provisions of any valid treaty," and that "[i]f the President and Senate have the power to conclude treaties on subjects that are beyond the scope of Congress's legislative powers, then the Necessary and Proper Clause makes clear that Congress has the power to adopt legislation implementing the provisions of such treaties as domestic law."59

The "new federalist" versus "nationalist" debate over federalism and the treaty power is far from over, but its implications should not be overlooked in the global environmental governance context. Climate change negotiations aimed at forest practices provide an ideal set of circumstances for studying how the above constitutional debate plays out in international relations. Because the U.S. Constitution grants the national government the authority to negotiate treaties, ⁶⁰

^{54.} Thomas Jefferson, A Manual of Parliamentary Practice: For the Use of the Senate of the United States, in Jefferson's Parliamentary Writings 353, 421 (Wilbur Samuel Howell ed., 1988).

^{55.} Swaine, supra note 1, at 474.

^{56.} Id. at 475.

^{57.} See David M. Golove, Treaty-Making and the Nation: The Historical Foundations of the Nationalist Conception of the Treaty Power, 98 MICH. L. REV. 1075 (2000). Golove also provides a thorough analysis of the intensity of the debate between new federalists and nationalists. See id. at 1076–81; see also Hollis, supra note 52, at 1330–31.

^{58.} Golove, *supra* note 57, at 1087–88.

^{59.} Id. at 1099.

^{60.} See U.S. Const. art. II, § 2, cl. 2.

while state and local governments maintain primary regulatory authority for land use activities like private forest management, ⁶¹

[t]he US's governmental system of federalism, engrained in the US Constitution and receiving staunch protection by the US judiciary, causes domestic implementation of certain international forest governance scenarios to be more viable than others. . . . US federalism . . . represents a *specific* legal constitutional requirement for decentralization, whereby a national government is judicially required to divulge regulatory authority to sub-national units (the states) in the area of direct forest management. ⁶²

Imagine, for instance, that the United States signed and ratified an international treaty under which the U.S. Congress agreed to pass domestic legislation establishing nationwide forest management mandates on publicly and privately owned forest lands. Such mandates might require maintaining partial forest cover on forested lands, implementing soil erosion reduction programs, establishing nationwide buffer zones in forested watersheds, or limiting fertilizer use. ⁶³

- 61. As scholars note, "[u]nder the US Constitution, the federal government has limited authority and responsibility; all other powers are reserved for the states. Forestland management and use was one such reserved power." Rose et al., *supra* note 31, at 239.
- 62. Hudson I, *supra* note 5, at 354–55 (emphasis in original) (citations omitted). Scholars have described the U.S. Constitution as establishing "a very limited concentration of powers in the nation's central institutions. . . . [T]he original allocation of jurisdiction to the national government was . . . modest with the unspecified, but apparently broad, residue being left with the states." Ronald L. Watts, The American Constitution in Comparative Perspective: A Comparison of Federalism in the United States and Canada, 74 J. AM. HIST. 769, 769 (1987). It is true that, "[t]hough the balance of power between the state and federal governments shifts periodically in U.S. constitutional jurisprudence—thus leading to court 'protection' of states' rights to a greater or lesser degree than federal power—the judicial system resolutely protects the principle that is U.S. federalism." Hudson II, supra note 5, at 383 n.70. As noted by Professor Watts, "[i]n the United States there have been fluctuations in the relative strengths of the national and state governments " Watts, supra at 773. Nonetheless, "the courts and particularly the Supreme Court have come to play a prominent role through their exercise of judicial review to ensure the constitutionality of legislation and executive and administrative action relating to . . . the distribution of jurisdiction between the national and state governments." Id. at 789.
- 63. Hudson I, *supra* note 5, at 358. The IPCC has stated that international agreements on forests could ensure the implementation of:

[f]orest management activities to increase stand-level forest carbon stocks include harvest systems that maintain partial forest cover, minimize losses of dead organic matter (including slash) or soil carbon by reducing soil erosion, and by avoiding slash burning and other high-emission activities. Planting after harvest or natural disturbances accelerates tree growth and reduces carbon losses relative to natural regeneration. Economic considerations are typically the main constraint, because retaining additional carbon on site delays revenues from harvest. The potential benefits of carbon sequestration can be diminished where increased use of fertilizer causes greater N₂O emissions.

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Congressional legislation implementing the treaty, however, would arguably be an impermissible intrusion into an area of state regulatory control, thus effectively prohibiting U.S. participation in the treaty. Based upon *current* constitutional understandings, states maintain direct regulatory authority over private forest management activities under their general "land use" regulatory authority. 64 As a result, states are responsible for establishing stand density, reforestation, and riparian buffer zone requirements; governing clear-cutting practices; and implementing numerous other "best management practices" on state-owned and private forestlands. 65 This division of subnational forest regulatory authority between the federal and state governments is especially problematic for the United States; even though central governments own approximately 86% of forests worldwide, ⁶⁶ the U.S. federal government only owns 35% of U.S. forestland. ⁶⁷ State governments own 5% of U.S. forests, and private landowners own the remaining 60%—a significant variance from the global pattern of forest ownership.⁶⁸ Furthermore, nearly 89% of U.S. timber is harvested from private lands. 69 Thus,

a global governance scenario that required that "within x number of years, treaty participants must increase and maintain forest area by 25 percent and implement active carbon sequestration projects on 50 percent of their forested lands" may not be viable under the U.S. federal system because the U.S. government arguably would be unable to ensure compliance with the mandate on even a majority of forested lands within its borders. . . . State governments would claim sole authority to pass laws prescribing increased forest density and carbon

Michael Dutschke, Elnour Elsiddig, Justin Ford-Robertson, Peter Frumhoff, Timo Karjalainen, Olga Krankina, Werner A. Kurz, Mitsuo Matsumoto, Walter Oyhantcabai, Ravindranath N.H., Maria José Sanz Sanchez & Xiaquan Zhang, *Forestry, in CLIMATE CHANGE 2007: MITIGATION OF CLIMATE CHANGE 541, 551 (Bert Mertz et al. eds., 2007), available at http://www.ipcc.ch/publications and data/ar4/wg3/en/ch9.html.*

- 64. See supra note 61 and accompanying text; supra note 39.
- 65. See JAN G. LAITOS, SANDRA B. ZELLMER, MARY C. WOOD & DANIEL H. COLE, NATURAL RESOURCES LAW 849 (2006). Despite maintaining the regulatory authority to do so, most states do not even legally place forest management standards upon private forest managers. Scholars have noted that "[a]lthough a few states have laws that regulate forest practices on private land, most rely upon *voluntary* best management practices and technical assistance." Rose et al., *supra* note 31, at 238 (emphasis added).
- 66. See Arun Agrawal, Ashwini Chhatre & Rebecca Hardin, Changing Governance of the World's Forests, 320 SCIENCE 1460, 1460 (2008).
 - 67. U.N. ENV'T PROGRAMME, supra note 15, at 110.
 - 68. See id.
- 69. U.S. DEP'T OF AGRIC., U.S. FOREST FACTS AND HISTORICAL TRENDS 7 (Sept. 2001), available at http://fia.fs.fed.us/library/briefings-summaries-overviews/docs/ForestFacts Metric.pdf. Carbon flux, or the net difference between carbon removal and carbon addition to the atmosphere, is 50% greater on public forestlands in the United States than on private forestlands, most likely resulting "from greater land use conversions and disturbance (including timber harvest) on private forests relative to public forests." WHITE & ALIG, *supra* note 12, at 9–10.

sequestration requirements on the remaining 65 percent of forests either on private lands or in state ownership. ⁷⁰

Whether federalism limits the U.S. treaty power in the case of forests and climate is further complicated by the fact that the seminal U.S. constitutional case on the issue provides little clarity, due to its narrow facts. Though decided in 1920, *Missouri v. Holland*⁷¹ remains the point of reference for determining the treaty power's scope in allowing national government regulation of natural resources and other subject matter traditionally regulated by the states. Indeed, Professor Henkin framed *Holland* as "perhaps the most famous and most discussed case in the constitutional law of foreign affairs."

Holland arose out of a treaty signed on December 8, 1916 by the United States and Great Britain, recognizing that "many species of birds in their annual migrations traversed certain parts of the United States and of Canada . . . were of great value as a source of food and in destroying insects injurious to vegetation, but were in danger of extermination through lack of adequate protection." To implement the treaty domestically, the United States passed the Migratory Bird Treaty Act (MBTA)⁷⁴ to prohibit the killing, capturing, or selling of migratory birds covered by the treaty. The state of Missouri challenged the federal government's authority to enforce the MBTA, arguing that the act unconstitutionally interfered with the rights reserved for the states under the Tenth Amendment, and additionally that states traditionally controlled the management of wildlife resources. The federal government responded by asserting the supremacy of its constitutional treaty power—and correspondingly all domestic legislation passed pursuant to it—over the state's claimed authority.

The Supreme Court resolved the dispute by first noting the supremacy of federal laws passed pursuant to the treaty power established in Article VI of the Constitution, finding that "[i]f the treaty is valid there can be no dispute about the validity of the [MBTA] under Article 1, § 8, as a necessary and proper means to execute the powers of the Government." The Court found that the MBTA did not violate any specific portion of the Constitution, and should be upheld *unless* it was prohibited by the Tenth Amendment under the facts of the case. The Court stated that "[t]he language of the Constitution as to the supremacy of treaties being general, the question before us is narrowed to an inquiry into the ground upon

^{70.} Hudson II, supra note 5, at 400 (citation omitted).

^{71. 252} U.S. 416 (1920).

^{72.} LOUIS HENKIN, FOREIGN AFFAIRS AND THE UNITED STATES CONSTITUTION 190 (2d ed. 1996).

^{73.} Holland, 252 U.S. at 431.

^{74. 16} U.S.C. §§ 703–712 (2006).

^{75.} Holland, 252 U.S. at 431.

^{76.} Id. at 430-31.

^{77.} See id. at 430.

^{78.} See id. at 432.

^{79.} *Id*.

^{80.} See id. at 433-34.

which the present supposed exception is placed,"⁸¹ and that "[n]o doubt the great body of private relations usually fall within the control of the State, but a treaty may override its power. . . . [I]t only remains to consider the application of established rules to the present case."⁸² The Court ultimately determined that the specific facts of the case did not warrant overturning the MTBA on Tenth Amendment grounds. In doing so, the Court focused on the migratory nature of the birds (being owned by no particular party) and the national interest at stake as weakening the state's claim of sole regulatory authority over the resource.⁸³ In other words, the resource at issue crossed international boundaries, and thus Congress could act without violating the Tenth Amendment since the resource could be adequately managed "only by national action in concert with that of another power."⁸⁴

The narrow fact pattern presented in *Holland*, however, is distinguishable from that which would be presented by private forests. Private forest management has traditionally been considered a land use activity subject to the exclusive regulatory authority of state governments and otherwise reserved for the states under the Tenth Amendment. 85 Furthermore, forests differ from wildlife because the federal government has never before sought regulatory inputs into direct private forest management practices, forests are owned by identifiable public and private entities, and forests are not migratory resources. Finally, "the history of state control over private forest management (and land use generally) demonstrates that the federal government customarily has not been considered a necessary party to private forest management—and forests are not 'protected only by national action in concert with that of another power." 86 As a result, the fact-specific nature of the Holland analysis, combined with recently revived principles of "new federalism," potentially renders Holland of very little precedential value in defending domestic implementation of an international treaty prescribing private forest management standards.

A number of scholars agree that *Holland* may be limited to its facts, noting that "although *Holland* has been construed as giving the treaty power complete immunity from federalism limitations, the decision itself can be read much more narrowly," and that "there is a substantial risk that subject-matter limitations . . . [may be] applied to the exercise of the treaty power. While *Missouri v. Holland* may survive for the foreseeable future, it will likely be read narrowly." Or, as summarized by one scholar,

^{81.} Id. at 432.

^{82.} Id. at 434-35.

^{83.} The Court noted that "[w]ild birds are not in the possession of anyone . . . [t]he whole foundation of the State's rights is the presence within their jurisdiction of birds that yesterday had not arrived, tomorrow may be in another State and in a week a thousand miles away." *Id.* at 434.

^{84.} Id. at 435 (emphasis added).

^{85.} Rose et al., supra note 31, at 239; see supra text accompanying note 61.

^{86.} Hudson II, *supra* note 5, at 417 (emphasis in original).

^{87.} Bradley, supra note 7, at 459.

^{88.} Swaine, supra note 1, at 412.

[T]he expansive, nationalist view of the treaty power is unlikely to survive sustained analysis intact and will likely be cabined by some type of limiting principle. . . . [T]he Supreme Court will be forced to reexamine in a serious way, for the first time in nearly eighty years, an ill-defined, poorly understood constitutional doctrine (the nationalist view) It only seems prudent to anticipate that instead of feeling inexorably bound by relatively moribund precedent, the Court will instead endeavor to assimilate the treaty power into the revived federalism that it has put forward with such frequency. 89

Yet another scholar is even more direct, stating that "Missouri v. Holland may be canonical, but it does not present a strong case for the application of stare decisis. It is wrongly decided and should be overruled." ⁹⁰

Ultimately, a strong argument exists that under current understandings of U.S. constitutional law the U.S. federal government would be constrained from entering into and implementing an international climate treaty that sought a certain threshold of control over forest management activities because nearly two-thirds of U.S. forests are under subnational regulatory authority. In this way, "U.S. federalism is predisposed to conflict with principles of international law, not only in the negotiation of treaties, but perhaps more importantly in the implementation of treaties governing areas considered the subject of traditional state authority, like forest management."

The United States is not alone, however, in its status as a federal system potentially constrained in international climate negotiations by subnational units of government. Professor Swaine has noted that, "[f]ederal states not infrequently seek broader concessions based on the political feasibility of national implementation, but the arguments that have had purchase are based on more genuine constitutional limits. Much the same may be said with respect to . . . outright . . . refusals to participate based on federalism grounds." Indeed, numerous other federal systems control important forest resources worldwide and present potential difficulties for international negotiations. As a result, a variety of countries at the negotiating table could each be legally constrained in domestic treaty implementation.

- 89. Fischer, supra note 33, at 186.
- 90. Rosenkranz, supra note 52, at 1937.
- 91. See supra text accompanying note 15. As a short-term means of avoiding the negative effects of such a restraint, scholars have argued:

it is apparent that . . . a global forest treaty based upon "traditional governance" and prescriptive mandates that may run afoul of federalism principles in the United States [should be avoided]. Market-based initiatives like REDD, forest certification, and ecosystem service transaction programs would provide the best opportunity to achieve global forest management goals and would do so with the uncompromised leadership and participation of the United States.

Hudson II, supra note 5, at 428–29.

- 92. Hudson II, *supra* note 5, at 395. For a broader discussion on the tension between U.S. federalism and international law and treaty obligations, see *id.*, Part II.D.
 - 93. Swaine, supra note 1, at 445–46; see also Hollis, supra note 52, at 1327–28.

The next Part introduces and describes the three elements of federal constitutional orders that allow these systems to avoid such difficulties at the global scale while at the same time preserving the benefits of sustainable decentralized forest governance on local scales—a necessary precursor to Part III's comparative analysis of the constitutional orders of Australia, Brazil, Canada, India, and Russia in the context of forest management. Part III's analysis permits a determination of which of the three elements from Part II each system currently maintains. This descriptive analysis in turn allows for both a better understanding of the potential consequences that federal constitutional structure may have for climate change negotiations, as well as an indication of which federal systems maintain constitutional orders that would require adjustment to strike the difficult balance between global climate governance and decentralized forest management.

II. ELEMENTS OF FEDERAL CONSTITUTIONAL ORDERS THAT BEST BALANCE GLOBAL FOREST GOVERNANCE AND DECENTRALIZED FOREST POLICY MAKING

Though the potential for subnational governments to place constitutional constraints on national governments may cause federal systems to present more difficulties for international climate negotiations than do unitary systems of government, it is a mistake to assume that federal systems uniformly do so. The federal systems assessed in Part III below maintain constitutions that vary greatly in their allocation of constitutional authority over forest management between the national and subnational governments. In fact, certain federal systems maintain constitutions that allow their involvement in climate change negotiations to approximate the operation of unitary systems of government—at least from a legal perspective—and even to facilitate potentially more effective treaty implementation than unitary systems as the benefits of decentralized forest *management* may be more readily achieved in federal systems that are already constitutionally decentralized.

To most effectively balance decentralized forest governance in federal systems with successful negotiation and implementation of a treaty aimed at forest management, however, federal systems must maintain three key elements: (1) national constitutional primacy over both national and subnational forest policy, (2) national sharing of constitutional authority over forest policy with subnational governments, and (3) forest policy institutional enforcement capacity. The following description of these three elements provides context for Part III's survey of which federal systems here reviewed currently maintain all or some of these elements. Likewise, the survey in Part III will make more clear the meaning and implications of each of these elements through the provision of tangible examples.

A. National Constitutional Primacy over Forest Policy

When the present needs are especially urgent, and local costs of exploitation are not immediately incurred, resources are exploited. Achieving positive environmental and social outcomes requires

standards and means for ensuring that nationally defined environmental and social concerns are taken into account. 94

"National constitutional primacy" is a term this Article introduces to describe the attribute of a federal system whereby the national government maintains constitutional authority to guide regulatory or management standards for a resource that may be the subject of domestic legislation passed pursuant to an international treaty—here, forest management included within a climate treaty. National constitutional primacy over forest policy is a key element for federal system participation in such a treaty for the simple reason that a national government ultimately unconstrained by subnational interference in domestic policy can more freely arrange its international obligations. To be clear, the introduction of this element is not advocating an evisceration of decentralized forest policy. 95 Indeed, as discussed in Part II.B below, the numerous benefits of decentralized forest governance are well documented: reduction of central government bureaucracy resulting in more efficient decision making; better access to local knowledge leading to increased understanding of local needs and constraints; better information flow between local and central governments, as well as between the government and private sector; greater local cooperation and stakeholder interest in governance participation; and reduction of central government "political meddling" and corruption. 96 Each of these is a crucial component to effective resource governance on local, national, and international scales.

94. Jesse C. Ribot, *Choosing Representation: Institutions and Powers for Decentralized Natural Resources Management, in* The Politics of Decentralization: Forests, Power and People, *supra* note 8, at 86, 98.

95. As a general matter, scholars maintain mixed views on the value of forest policy decentralization, and the means by which it occurs, with some arguing

for slowing the pace [of decentralization] in order to give governments and citizens a chance to adapt to the new features of a decentralized approach; others suggest that local governments and citizens will become adept at dealing with their new powers only by using them. Although [scholars] see the potential value of decentralization, some favour a stronger central role and others a stronger local role, in the balance of power. Some show more faith in communities' management abilities, some have less.

Jürgen Blaser, Christian Küchli, Carol J. Pierce Colfer & Doris Capistrano, *Introduction*, *in* The Politics of Decentralization: Forests, Power and People, *supra* note 8, at 1, 5.

96. See Gregersen et al., supra note 8, at 27–28. Other scholars have noted that the primary arguments for decentralization are that

decentralization produces more just and equitable outcomes and that localized control is more functional than state control. Put simply, consultation and collaboration with social movements and voluntary associations provides an effective means of harnessing local knowledge and agency in both plan making and implementation. Engaged civic actors can also act as a check on state power—thus helping to democratize governance—and offer a counterpoint to its limited rationalist worldview.

Marcus B. Lane, *Decentralization or Privatization of Environmental Governance? Forest Conflict and Bioregional Assessment in Australia*, 19 J. RURAL STUD. 283, 284–85 (2003) (emphasis omitted) (citations omitted). These benefits track the noted benefits of federalism generally, as summarized by Professor Rosenn: federalism promotes economic growth,

Despite these well-recognized, tangible benefits of decentralized local forest governance, scholars have noted that,

while there is a trend toward decentralization of forest governance within many countries, there also are developing clear arguments for mechanisms, central or even international (e.g. through global conventions), to ensure that activities and events that affect more than one state and that are involved in the production of national or global public goods associated with the environmental services derived from forests are being adequately considered by those with the mandate to manage them. ⁹⁷

Indeed, climate change has been perhaps the foremost driver for "clear arguments" against "over-decentralization," as the role of forests in regulating global atmospheric carbon has been increasingly recognized over the last twenty years. Suddenly the aggregated effects of decentralized, local decision making regarding forest resources have taken on global significance, as sequestration of carbon is perhaps the most important "environmental service" performed by forests in modern times. In short, "[d]ecentralization offers great opportunities for improved forest management, but also great challenges. It is far from being a final solution to the ills of the forest sector because significant possible disadvantages and dangers threaten its potential benefits."98 National constitutional primacy provides a check on these well-recognized disadvantages of decentralized forest governance, which include making more difficult the coordination and implementation of national policies, undermining national objectives when local objectives are not consistent, decision making at local levels that is not socially or environmentally desirable or sustainable, loss of noncommercial objectives of national forest policy, and pressure to extract forest resources for immediate local benefit to the detriment of long term sustainability, to name a few. 99

National governments in federal systems often maintain regulatory responsibility for forest resource issues that have effects across subnational boundaries or that provide national or international ecosystem services and public

reciprocity in the enforcement of the law, safeguard against the potential tyranny of centralized power, encouragement of local citizen participation in governance, experimentation with new forms of governance ("laboratories for experimentation"), and administrative efficiency as decentralized governments can specifically tailor laws to fit local needs. Keith S. Rosenn, *Federalism in the Americas in Comparative Perspective*, 26 U. MIAMI INTER-AM. L. REV. 1, 6–7 (1994).

- 97. Gregersen et al., *supra* note 20, at 8–9.
- 98. Gregersen et al., supra note 8, at 29.

99. See id. at 28. Other noted problems are failure to achieve economies of scale, potential increase in arbitrariness and corruption, and the potential for local elites to control decentralized institutions. See id. These negatives track the noted pitfalls with federalism generally, as summarized by Professor Rosenn—that federalism makes governance of problems that transcend subnational boundaries more difficult, creates economic inefficiency as overlapping laws conflict, causes a race to the bottom among states competing for business and growth, imposes penalties on citizens of neighboring states, creates redundant governance, disenfranchises local minorities at the expense of local majorities, and causes overall instability. See Rosenn, supra note 96, at 7–8.

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goods, and "[o]ften, the federal government influences or controls state activity through federal laws, incentives and checks and balances related to the use of resources." ¹⁰⁰ Even so, some federal systems controlling vast forest resources do not maintain a constitutional framework for broad national forest policy formulation that ensures the benefits of decentralized management are maximized in balance with national or global provision of public goods. Pursuing mechanisms for addressing this constitutional gap in these systems is important, as the policy goals of decentralized forest management may best be achieved if federal systems will "[i]dentify which national policies should override the preferences of decentralized bodies and establish clear rules for their enforcement at [the] national level" and "[e]stablish forest management minimum standards for decentralized institutions." ¹⁰¹ In fact, a report issued to the Fourth UNFF by participants of the Interlaken decentralization workshop stated as one of the guiding principles of effective forest policy decentralization implementation that "[d]ecentralization in the forest sector should not be implemented in isolation from a general national forestry strategy, such as national forest programmes." 102

Given the importance of a national government's ability to spur effective decentralized forest governance, what this Article argues best facilitates federal nation-state agreement on global forest governance is not direct national *control* per se over forest policy at all levels, but rather national constitutional authority to act as a *safety net*—a function that may be termed "Fail-safe Federalism." ¹⁰³ In other words, "national constitutional primacy" denotes national governments maintaining legal authority to guide forest policy—including the ability to enter into international climate and forest treaties unconstrained—while leaving subnational governments with primary regulatory and management roles. ¹⁰⁴ To be certain, too much national control over forest management can also be detrimental to forest governance. Scholars note that "[c]entral governments . . . commonly maintain control over forest management through extensive bureaucratic procedures, such as forest management plans, price controls, marketing and permits for cutting, transport and processing. In some cases this represents a loss of local decision-making authority"¹⁰⁵ Rather, the type of national constitutional

^{100.} Gregersen, supra note 8, at 15.

^{101.} Id. at 28-29.

^{102.} Doris Capistrano & Carol J. Pierce Colfer, *Decentralization: Issues, Lessons and Reflections, in* The Politics of Decentralization: Forests, Power and People, *supra* note 8, at 296, 311.

^{103.} See generally Blake Hudson, Fail-Safe Federalism and Climate Change: The Case of U.S. and Canadian Forest Policy, 44 CONN. L. REV. 925 (2012).

^{104.} This approach would be consistent with principles of dynamic federalism. *See supra* note 38.

^{105.} Anne M. Larson, Democratic Decentralization in the Forestry Sector: Lessons Learned from Africa, Asia and Latin America, in The Politics of Decentralization: Forests, Power and People, supra note 8, at 32, 36. Some scholars have noted that "[t]he role of national government is to ensure that the many micro-level management decisions of local community governments aggregate into a coherent policy, not to mandate a policy in ways that disrupt and marginalize the community members who ultimately form the state/forest interface." Craig Segall, Note, The Forestry Crisis as a Crisis of the Rule of Law, 58 STAN. L. REV. 1539, 1549 (2006).

primacy that can most effectively balance global governance with the benefits of subnational decentralized policy is that which establishes a minimum forest management standards framework within which subnational governments may operate with discretion, ¹⁰⁶ and which subnational governments can supplement with even higher standards if they so choose. Importantly, as discussed in this Article's conclusion, national constitutional primacy need not flow out of top-down, prescriptive constitutional mandates at the national level, as it can arise bilaterally out of cooperative federalism arrangements or even horizontally out of regional agreements among subnational governments.¹⁰⁷

Achieving the appropriate degree of national government oversight is crucial because "[a]lthough too much oversight of local governments can be detrimental, checks and balances on local authority over forests are essential for good governance and to protect resources." Other scholars note that,

even where secure decentralization has been implemented, support from central government and others are needed to ensure that natural resources are not over-exploited Some of these efforts include minimum environmental standards Central government must play a key role in advancing reforms needed to achieve effective decentralization. ¹⁰⁹

Stated differently, "simply devolving power to communities can produce either no positive change or even negative change, if devolution reduces the power of the national government to stop local resource misuse that might once have been limited by national policy." ¹¹⁰

Ultimately, scholars who are well aware of the value of decentralized forest policy recognize that a "minimum standards" approach is "an important role of central governments," because,

minimum environmental standards are a complementary means of codifying . . . principles [of decentralization] in law, thus establishing greater local autonomy in natural resources management and use. The minimum-standards approach complements decentralization by specifying the boundaries to the domain of local autonomy without restricting discretion within those boundaries

A minimum environmental standards approach—a set of restrictions and guidelines for environmental use and management—would replace

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^{106.} See Larson, supra note 105, at 36. Scholars have noted that "[e]lected forest councils in Kumaon, India, have historically operated under such an arrangement. They have an important autonomous decision-making space within rules and limits established by the central government.... The upward, as well as downward, accountability of the councils has been important to their success." *Id.*

^{107.} See Hudson, supra note 38.

^{108.} Larson, supra note 105, at 43.

^{109.} Ribot, *supra* note 94, at 89–90.

^{110.} Segall, supra note 105, at 1556.

the centrally directed micromanagement approach currently exercised through elaborate plans and planning processes. ¹¹¹

The type of Fail-safe Federalism facilitated by national constitutional primacy strikes a balance between centralized planning and minimum standards at the federal level and decentralized implementation, harnessing of local information and expertise, and other benefits at the subnational level.

Despite the importance of Fail-safe Federalism and minimum national standards, national government involvement in federal system decentralized forest policy cannot be divined from thin air. If a federal constitution does not permit national constitutional primacy over forest policy at all levels (as is arguably the case in the United States where the national government only maintains primacy over 35% of forests) then the benefits of decentralized management may not be balanced with the provision of national environmental goods and other goals—at the very least there will be no *legal* mechanism for ensuring that they are. Equally important, protection of global goods provided by forests, such as climate change regulation via forest carbon sequestration, may not be facilitated by an international treaty because key federal systems may refuse to participate based upon domestic constitutional concerns. Thus, national constitutional primacy provides a legal mechanism that facilitates the benefits of both decentralized management and responsible centralized forest planning in a way that is realized not only by the individual nation, but by the international community engaged in creating effective solutions to global environmental problems such as climate change. 112

B. National Sharing of Constitutional Forest Authority

National sharing of constitutional forest authority can be summarized simply as a national government maintaining constitutional primacy over forest policy at both national and subnational levels, while at the same time voluntarily and cooperatively sharing that authority with subnational governments to achieve the most effective management on localized scales. It is, in effect, the other side of the "national constitutional primacy" coin—a federal system cannot maintain this element unless it first maintains national constitutional primacy over forest management. A federal system may, on the other hand, maintain national constitutional primacy and choose to "overcentralize" national forest policy by refusing to share that authority with subnational governments in a way that is consistent with theories of dynamic federalism. From a treaty negotiation standpoint, having legal authority to implement domestic policy allows a national government to enter into an international agreement unconstrained, while its willingness to share decentralized forest management responsibilities facilitates

^{111.} Ribot, *supra* note 94, at 98.

^{112.} Centralized forest planning not only facilitates international agreement, but also provides consistent policy across subnational borders and the prevention of a "race to the bottom" or "tragedy of the commons" in subnational forest policy. Blake Hudson, *Commerce in the Commons: A Unified Theory of Natural Capital Regulation Under the Commerce Clause*, 35 HARV. ENVTL. L. REV. 375 (2011).

^{113.} See supra note 38.

more effective domestic implementation of the agreement. Even outside the context of an international agreement, this element also aligns the benefits of sustainable decentralized forest policy with the provision of global goods and services, since the national government is more likely to value a wider range of forest goods and services than do individual subnational governments. Ultimately, this sharing of authority is crucial, as a condition of good decentralized forest governance is "[e]ffective and balanced distribution of forest related responsibilities and authority among levels of government" and "[c]ertain forest management decisions are better made at the subnational, or even local levels of government, while others may best be retained at a central level." ¹¹⁴ In other words, this element allows the national government to act as the aforementioned fail-safe via a "minimum standards" approach without giving rise to the myriad of problems caused by a national government that micromanages policy decisions on local scales.

As noted above, suitable responsibilities to be maintained by the national government include providing coherent forest management on issues that may have spillover effects across political and geographic boundaries of subnational units and the provision of national and even international goods and services. There is a need for "strong central government guidance and overall leadership," and "[d]ecentralized forest management does not mean less need for a strong central government." Nonetheless, in order to preserve the resource management gains made during the global shift toward decentralized forest policy, it is important that even in the presence of constitutional authority to do so, national governments in federal systems do not overcentralize in a way that usurps forest policy decisions best left to subnational governments.

Ultimately, national governments that are limited in their ability to implement a treaty effectively on domestic scales will be less inclined to enter into an international agreement—rendering national constitutional primacy of great importance. National sharing of constitutional forest authority, however, achieves the crucial balance of ensuring that international obligations to which the national government can unilaterally agree are domestically carried out in the most effective manner possible and in a way that is most consistent with the federal form of governance chosen by many nations controlling crucial forest resources.

C. Institutional Enforcement Capacity

Scholars have noted that "forest governance is strongly dependent on the institutional and political conditions of the government in general" and that "[c]losing the gap between law and on-ground outcomes is one of the main challenges in the forest sector . . . so issues of enforcement and compliance are

^{114.} Contreras-Hermosilla et al., *supra* note 17, at 7.

^{115.} *Id.* This is because "[u]ncoordinated decisions on forest management taken at sub-national levels of government may weaken national policy coherence." Arnoldo Contreras-Hermosilla, Hans M. Gregersen & Andy White, *Forest Governance in Countries with Federal Systems of Government: Lessons and Implications for Decentralization*, CTR. FOR INT'L FORESTRY RES., FORESTS AND GOVERNANCE PROGRAMME 2008, at 12, *available at* http://www.cifor.cgiar.org/publications/pdf_files/Books/BContreras-Hermosilla0701.pdf.

^{116.} Contreras-Hermosilla et al., supra note 17, at 4.

amongst the most important arenas of policy analysis." ¹¹⁷ Indeed, institutional enforcement capacity ¹¹⁸ is a crucial element for federal-system treaty agreement and implementation for another obvious reason—without the ability to adequately enforce domestic policy, international obligations cannot be met, and, therefore, national governments will be less likely to agree to obligations in the first instance. It is true that "[r]elationships between the central and sub-national governments are never constant in a country and changes are to be expected in a democratic country with a federal system of government." ¹¹⁹ Yet these political shifts in ability or willingness to implement national policies are distinct from having a constitutional, legal capacity to do so.

As seen below, federal systems without adequate institutional enforcement capacity over forest management are hampered by unclear constitutional divisions of power between national and subnational governments, and between branches of the national government, and are further subject to corruption and other institutional maladies—resulting in direct, negative effects on international negotiations. A thorough assessment of institutional environmental enforcement problems is beyond the scope of this Article, and is otherwise thoroughly documented in the literature. It is important, however, to introduce this element here since, unfortunately, certain federal systems analyzed below maintain the first two key constitutional elements for facilitating climate treaty agreement and implementation but lack institutional enforcement capacity.

Part III now undertakes a comparative constitutional assessment of different federal systems that control important forest resources to analyze which systems maintain the key elements presented thus far.

III. IMPACTS OF SELECT FEDERAL CONSTITUTIONS ON INTERNATIONAL FOREST AND CLIMATE NEGOTIATIONS: SURVEY OF CONSTITUTIONAL AUTHORITY AND FOREST OWNERSHIP

As noted in Figure 1, above, federal nations controlling important forest resources enter international climate negotiations from widely divergent positions—both with regard to the division of constitutional authority over forest policy, as well as to the public-private allocation of forest ownership. Some federal constitutions place constitutional regulatory authority over all of a nation's forests in the hands of the national government, which presents fewer difficulties for global climate change governance as national governments can act without constitutional constraints during international negotiations. Other federal constitutions can be interpreted as authorizing virtually exclusive subnational government regulation of a vast majority of the nation's forests, effectively *prohibiting* a prescriptive regulatory role for the national government in setting management standards. While this approach limits the national government's ability to bind the nation to a treaty aimed at forests, it may better facilitate

^{117.} McDermott et al., supra note 10, at 21.

^{118. &}quot;Capacity" is here defined as "the ability of . . . governments to carry out their mandates." Larson, *supra* note 105, at 50.

^{119.} Contreras-Hermosilla et al., *supra* note 115, at 22.

sustainable decentralized forest governance since it provides legal protection from the disadvantages of overcentralization. In addition, private forests make up a majority of the forested land in some federal systems, with private forest management subject to exclusive subnational constitutional control; while in other systems, private and even subnationally owned forests may be subject to national regulatory authority. Various other federal systems fall somewhere in between these extremes of constitutional authority and forest ownership.

The following review describes which federal systems come from which divergent position in order to gain insight into the impacts those systems' domestic constitutional structures have on international climate negotiations. The review suggests that the federal systems here assessed; Australia, Brazil, Canada, India, and Russia—along with the United States via comparative analysis—can effectively be placed into three categories (Chart 1 below), based upon their retention of certain key elements discussed in Part II. Nations with all three elements provide models of federal systems that are most capable of engaging in global forest governance balanced with the realities of domestic federalism and the protection of local forest goods and services.

A. Australia

1. Constitutional Primacy, National Sharing, and Institutional Enforcement

The Australian Constitution provides no explicit environmental regulatory authority to either the national (or "Commonwealth") government or the states and territories. L20 As such—similarly to the United States—general authority to protect the environment is vested in the states, L21 and state and territory governments generally maintain constitutional authority to establish the legal and policy framework under which both public and private forests are managed. L22 A governance structure where subnational governments maintain primacy over domestic forest policy might be expected, as in the United States, to result in a domestic legal roadblock to the formation and implementation of an international treaty aimed at forest management activities.

Unlike the United States, however, the Australian High Court has definitively ruled that the Australian national government can gain regulatory authority over *any* subject matter if such regulation is based upon an international treaty, even if in an area of traditional state constitutional authority—a very different outcome than the much narrower result of *Holland*. ¹²³ The Australian High Court, in

122. COMMONWEALTH OF AUSTL., NATIONAL FOREST POLICY STATEMENT: A NEW FOCUS FOR AUSTRALIA'S FORESTS 1 (1995), available at http://www.daff.gov.au/_data/assets/pdf_file/0019/37612/nat_nfps.pdf; see also Ferguson & Chandrasekharan, supra note 16, at 75 (stating that "[u]nder Australia's constitution, administration of all matters of land management, including forestry, were delegated to the provinces").

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^{120.} James Rasband, James Salzman & Mark Squillace, Natural Resources Law and Policy 171 (2d ed. 2009).

^{121.} Id. at 172.

^{123.} Unlike the U.S. Constitution, the Australian Constitution is silent regarding whether the federal and state governments have shared, or whether either has exclusive, authority to

Commonwealth v. Tasmania, 124 "confirmed the Commonwealth's authority to intervene in the management of natural resources in order to meet its international obligations" and "reinforced an earlier High Court decision . . . which set the Commonwealth's international obligations above state's rights." The constitutional power upon which the Tasmania decision was based is Section 51 of the Australian Constitution, the "external affairs" power, which grants the Commonwealth government the authority to pass laws governing "external affairs." As a result, the Australian national government can now "legislate comprehensively in respect of state properties in reliance on an international treaty," and "Parliament does not lack power to implement treaties to which Australia is or intends to become a party, whatever the subject matter." Regarding Tasmania and related cases, scholars have argued that,

[o]ver time, the legal and political implications of these decisions became clear: environmental policy was a jurisdiction shared by both the states and the Commonwealth. In time, this led to increased institutional experimentation at the national level to cope with the 'forestry question' (sic). A variety of new land management arrangements emerged, including new policies and structures of management. ¹²⁹

Ultimately, the Australian High Court's jurisprudence firmly establishes that the Australian national government, when acting pursuant to an international treaty, has constitutional primacy over decentralized forest policy (element 1). 130

As a result, even though subnational governments maintain primary constitutional authority for regulating forests in Australia, the Commonwealth and its agencies have exercised increasing influence over forest governance in the

negotiate and implement treaties. See Brian R. Opeskin & Donald R. Rothwell, The Impact of Treaties on Australian Federalism, 27 Case W. Res. J. Int'l L. 1, 2 (1995). For a discussion of the implications of this constitutional difference, see Cyril Robert Emery, Treaty Solutions from the Land Down Under: Reconciling American Federalism and International Law, 24 Penn St. Int'l L. Rev. 115, 125 (2005); Julia Yoo, Note, Participation in the Making of Legislative Treaties: The United States and Other Federal Systems, 41 COLUM. J. Transnat'l L. 455, 487 (2003).

- 124. (1983) 158 CLR 1 (Austl.).
- 125. Marcus B. Lane, Regional Forest Agreements: Resolving Resource Conflicts or Managing Resource Politics?, 37 Austl. Geographical Stud. 142, 144 (1999) (citing Koowarta v Bjelke-Petersen (1982) 153 CLR 168 (Austl.)).
 - 126. Australian Constitution s 51 (xxix).
 - 127. Opeskin & Rothwell, supra note 123, at 31.
 - 128. Id. at 12 (emphasis added).
- 129. Lane, *supra* note 96, at 287 (citation omitted). Also noting that the High Court has consistently upheld Commonwealth involvement in forest policy as "in keeping with its constitutional powers for trade and foreign affairs." *Id.*
- 130. Scholars have argued that "[t]he U.S. legal environment is substantially different from that in Australia. While the Australian High Court has consistently favored the federal government's ability to make and implement treaties, the [U.S.] Supreme Court has applied limits to the U.S. federal government's power in a variety of areas" Emery, *supra* note 123, at 151.

states, ¹³¹ and "the politics of federalism" have had "an important impact on forest policy." ¹³² Indeed, forest conflicts in Australia have been "at the forefront of altering the character of federal relations in Australia." ¹³³ *Commonwealth v. Tasmania* and related cases involving federal intervention in areas of traditional state sovereignty ¹³⁴ have "had a profound impact on the distribution of power within the Australian federation" and have "substantial implications for Australian federalism," ¹³⁵ as they establish "an expansive view of the Commonwealth's power to implement treaties to which Australia is a party by enacting appropriate domestic legislation." ¹³⁶ Consequently, the Australian government is "constitutionally and legally empowered to act on environmental matters" ¹³⁷ and is "increasingly politically obliged to involve itself in contentious matters of natural resource policy," ¹³⁸ especially since "an expectation was created within the environmental movement that it could now appeal to the Commonwealth against any state decision." ¹³⁹ In other words,

the nature of Australian federalism has been fundamentally altered. Whereas it had long been assumed that natural resource policy was a state jurisdiction and that the Australian government had a *co-ordinating* function in which each level of government had distinct

the current position is that irrespective of whether or not a treaty is representative of international concern or that it contains an international obligation upon State Parties, the mere acceptance of the treaty by Australia is a sufficient basis for the Commonwealth to rely on the terms of the treaty to enact implementing legislation.

Id.

^{131.} Ian S. Ferguson, *Australian Forest Services: Institutions of Change or Changing Institutions?*, 75 COMMONWEALTH FORESTRY REV. 136 (1996). Scholars have noted that "[i]ncreasingly, the national government has used its powers to influence outcomes at a provincial or district level" Ferguson & Chandrasekharan, *supra* note 16, at 76.

^{132.} Lane, *supra* note 96, at 287.

^{133.} Id. (citation omitted).

^{134.} See, e.g., Richardson v Forestry Commission (1988) 164 CLR 261 (Austl.); Queensland v Commonwealth (1985) 159 CLR 192 (Austl.). Scholars note that these High Court cases "further expanded the scope of the external affairs power" and "had substantial implications for Australian federalism because the Commonwealth Parliament had never before been able to legislate comprehensively in respect of state properties in reliance on an international treaty. The Commonwealth Parliament also gained expanded powers over the environment." Opeskin & Rothwell, supra note 123, at 30–31. For further discussion of these cases, see id. at 33–42.

^{135.} Opeskin & Rothwell, supra note 123, at 10, 31.

^{136.} Id. at 42. Scholars have asserted that,

^{137.} Lane, *supra* note 125, at 145. Australia's 1995 National Forest Policy Statement acknowledges this federal authority, citing international agreements and acts of Parliament requiring federal government involvement in land use decision-making regarding forests. *See* NATIONAL FOREST POLICY STATEMENT, *supra* note 122, at 19–20.

^{138.} Lane, *supra* note 125, at 145 (citation omitted); *see also* NATIONAL FOREST POLICY STATEMENT, *supra* note 122, at 19–20; Lane, *supra* note 96, at 287.

^{139.} Lane, supra note 125, at 144.

jurisdictions, it was now clear that the states shared resource policy with the Commonwealth in a *concurrent* federation. ¹⁴⁰

Take, for example, the Environment Protection and Biodiversity Conservation Act (Conservation Act), ¹⁴¹ passed by the Australian national government in 1999 in order to "allow Australian Government involvement in environmental matters," and particularly management of native forests. ¹⁴² Because the Conservation Act invokes powers constitutionally reserved for the states, some of its sections are not applied in the presence of political agreements between the federal and state governments. ¹⁴³ The Conservation Act, however, is just one component of an increasing trend of federal involvement in forest matters, as "[s]everal national issues, including climate change, environmental heritage, water conservation and the protection of endangered species, have become more important since the implementation of the National Forest Policy Statement of 1992," and "[s]everal stakeholders are interested in having increased Australian Government intervention to coordinate a strategy to address the national issues that are independent" of political agreements between the federal and state governments (that is, cooperative federalism). ¹⁴⁴

Importantly, however, the Conservation Act has implications for both sides of the "national constitutional primacy" coin—though the Australian national government maintains constitutional primacy in the presence of an international treaty, the Conservation Act also demonstrates the Commonwealth government's commitment to sharing constitutional forest policy authority (element 2). In other words, the Australian national government has been quite vigorous in establishing principles of cooperative federalism whereby it retains the authority to intervene in state management of forests under its "external affairs" power, but leaves primary forest governance in the hands of the subnational governments for political and management reasons.

This approach is perhaps best evidenced by Australia's 1992 Inter-Governmental Agreement on the Environment (Inter-Governmental Agreement), which sought to reduce intergovernmental conflict by committing all governments to an agreement about their respective roles with respect to environmental issues. Under the Inter-Governmental Agreement, the Commonwealth voluntarily limited its role in resource policy to specific circumstances, including [r]epresenting the national interest.

^{140.} *Id.* at 145 (emphasis in original). Again, this is distinct from the United States, where the federal government has never claimed, nor been judicially conferred, land use and forest management regulatory authority.

^{141.} Environment Protection and Biodiversity Conservation Act 1999, (Cth) (Austl.).

^{142.} Kah Low & Sinniah Mahendrarajah, Future Directions for the Australian Forest Industry, ISSUES INSIGHTS, Mar. 2010, at 13, available at http://www.abare.gov.au/outlook/_download/a1.pdf.

^{143.} Id.

^{144.} *Id*.

^{145.} Inter-governmental Agreement on the Environment, May 14, 1992 (Austl.).

^{146.} Lane, supra note 125, at 145.

^{147.} Id.

"where the regional implications of proposals for the use of a resource transcend State boundaries and affect two or more jurisdictions . . . where there are relevant responsibilities under Commonwealth Acts of Parliament such as the Environment Protection (Impact of Proposals) Act [of] 1974," and "where, in the light of scientific evidence, the Commonwealth has obligations under international conventions." ¹⁴⁸ The Inter-Governmental Agreement is a political concession rather than a legal obligation, whereby the national government ceded part of its authority to the states by placing self-imposed restrictions on its power to regulate the environment. 149 Though the government may have *politically* ceded this authority, it did not do so constitutionally, as the High Court's rulings in Tasmania and related cases are dispositive on the question of constitutional authority. In other words, "the Commonwealth has, regardless of its legal and constitutional powers and capabilities, defined for itself a role narrower than its legal responsibilities," 150 and has "generally approached its relationship with the states in a spirit of cooperative federalism [and] self-imposed restraint in exercising its constitutional powers."151

Similar to the Inter-Governmental Agreement, the Commonwealth and the states have entered into agreement on the 1992 National Forest Policy Statement (Forest Statement), which established broad-based goals for Australia's native forests, including to "maintain an extensive and permanent native forest estate in Australia and to manage that estate in an ecologically sustainable manner so as to conserve the suite of values that forests can provide for current and future generations." The Forest Statement was also meant to establish a framework for cooperation between the federal and state governments on forest management and was "devised to give expression to the [Inter-Governmental Agreement] in terms of devolving policy control for resource management issues to the states." The Forest Statement establishes that,

State and Territory governments have primary responsibility for forest management, in recognition of the constitutional responsibility of the States for land use decisions and their ownership of large areas of

^{148.} NATIONAL FOREST POLICY STATEMENT, supra note 122, at 19–20.

^{149.} The Commonwealth's role in resource management is "restricted" to "[r]epresenting the national interest . . . [e]nsuring Australia's international obligations are met . . . [a]ssisting in the resolution of transboundary issues . . . [p]romoting co-operative approaches to assessment and standard setting," and "[c]oncern for its own environmental responsibilities arising from Commonwealth actions and decisions." Lane, *supra* note 125, at 145 (citation omitted).

^{150.} Id.

^{151.} Opeskin & Rothwell, *supra* note 123, at 2. Some have argued that this has "bound the Commonwealth politically, if not legally, to consensus-based outcomes." PHILLIP TOYNE, THE RELUCTANT NATION: ENVIRONMENT, LAW AND POLITICS IN AUSTRALIA 14 (1994). For a criticism of this approach, see Gary Musselwhite & Gamini Herath, *Australia's Regional Forest Agreement Process: Analysis of the Potential and Problems*, 7 FOREST POL'Y & ECON. 579, 580 (2005).

^{152.} NATIONAL FOREST POLICY STATEMENT, supra note 122.

^{153.} *Id.* at 4.

^{154.} Lane, *supra* note 125, at 146 (citation omitted).

forest. The States and Territories have enacted legislation that allocates forest land tenures and specifies the administrative framework and policies within which public and private forests are managed. Local governments have responsibilities for local land use planning and rating systems, which affect public and private forest management and use. 155

Under the Forest Statement, the national government, while maintaining no explicit constitutional authority over forest policy except that relating to nationally owned forests, is primarily responsible for "coordinating a national approach to both environmental and industry-development issues . . . including a national approach to forest issues" ¹⁵⁶—a recognition of the Commonwealth's implicit constitutional authority to order its international obligations under its "external affairs" power.

Other examples of the Commonwealth's sharing of national constitutional primacy are the Regional Forest Agreements (RFAs) negotiated between the national and state governments. RFAs constitute an attempt to navigate the politics of the national government having potentially unfettered regulatory authority over environmental resources and private property rights under its "external affairs" power. RFAs are twenty-year plans meant to guide the management of forests, to establish "long-term, durable agreement on the use of forests in order to provide industry with access to forest resources while protecting the environmental and cultural values of forest areas," and to "mediat[e] the tension between different levels of Government." Because "Commonwealth governments of all political persuasions have felt the electoral and policy impact of conflict with the states on environmental matters . . . [t]he RFA process [provides] a means of establishing a long-term resolution to questions of forest allocation and use in a way that reasserts the primacy of the states in forest management."

RFAs effectively constitute a political maneuver on behalf of the national government as a means of navigating "forest politics" in Australia by establishing shared authority with subnational governments in the area of forest management. Indeed, "[t]he political purpose of the RFA process . . . was to take forest issues off the political agenda by securing Commonwealth and State cooperation." As a result, RFAs also encapsulate both national constitutional primacy and national sharing of forest authority. With regard to primacy, RFAs allow the Commonwealth to directly participate in forest planning to take into account biodiversity, water production, wood production, and social and economic values. As a result, "the long-standing argument that forestry is a State responsibility under the Constitution has been superseded by these arrangements." Yet RFAs also represent a voluntary ceding of regulatory authority from the national government

^{155.} NATIONAL FOREST POLICY STATEMENT, *supra* note 122, at 1.

^{156.} Id.

^{157.} Lane, supra note 125, at 143.

^{158.} Lane, *supra* note 96, at 288.

^{159.} Lane, *supra* note 125, at 151.

^{160.} Musselwhite & Herath, *supra* note 151, at 581 (citation omitted).

^{161.} Ferguson, supra note 131, at 140.

to the states, given that "RFAs have surrendered much of the [forest regulatory] powers to the states." ¹⁶²

In sum, the Australian model of federalism, specifically in the context of climate change and forests, may be summarized as follows:

One response during the past ten years to the expanded scope of the Commonwealth Parliament's power over external affairs has been to adopt a more cooperative approach to federalism in Australia. Through this process, the states have had a greater policy input into decisions concerning Australia's treaty relations, and an expanded role in the domestic implementation and enforcement of the obligations imposed by those treaties. This approach has generally been a successful one provided there has been a clear division of responsibility between Commonwealth and states over the relevant subject matter and the Commonwealth has been able to gain the cooperation of the states in creating a cooperative legislative scheme. ¹⁶³

Ultimately, Australia maintains all three elements conducive to maximizing flexibility in international negotiations among federal systems of government, while also retaining the benefits of decentralized forest governance. National constitutional primacy allows the Australian national government to enter into an international treaty on climate and forests unconstrained and to act as a fail-safe in the absence of sound subnational forest policy. National sharing of constitutional authority facilitates mechanisms that allow subnational governments to both successfully implement the treaty and perform their functional role within a federal system to achieve the benefits of decentralized forest management. Institutional enforcement capacity in Australia allows the treaty and implementing legislation to be enforced. ¹⁶⁴

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^{162.} Musselwhite & Herath, *supra* note 151, at 585 (citation omitted).

^{163.} Opeskin & Rothwell, *supra* note 123, at 56–57. Even so, this approach has not been without its complications, as scholars note that this cooperative approach has caused delays in fulfilling international obligations, a lack of uniformity in implementing laws, and legal issues arising out of coordination between the federal and state governments and by the fact that a state has the potential to place the federal government in breach of its international duties. *Id.* at 57.

^{164.} The World Justice Project Rule of Law Index rates Australia ninth out of sixty-six countries studied for the absence of corruption, and eighth out of sixty-six for regulatory enforcement. MARK D. AGRAST, JUAN C. BOTERO & ALEJANDRO PONCE, THE WORLD JUSTICE PROJECT, THE WORLD JUSTICE PROJECT RULE OF LAW INDEX 2011 [hereinafter WORLD JUSTICE PROJECT], available at http://worldjusticeproject.org/sites/default/files/wjproli2011_0.pdf. Australia also has a positive score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities, which "integrates assessment of the stringency of environmental pollution standards, the extent of subsidization of natural resources, the strictness of enforcement and the quality of environmental institutions." McDermott et al., supra note 10, at 43.

2. Public/Private Forest Ownership

Approximately 74% of Australian forests are publicly owned and 26% are privately owned. As noted, Australian state and territory governments have primary responsibility for regulating both public and private forests, though both are also subject to federal regulation under the Commonwealth's "external affairs" power in the presence of an international treaty. Since the "external affairs" power received expanded interpretation in *Tasmania*, the national government has taken an even greater role in private forest management. The Forest Statement includes as one of its goals the sustainable management of privately owned forests, which is to be undertaken "through a combination of measures that may include dissemination of information about and technical support for forest management, education programs, conservation incentives, land-clearing controls, harvesting controls, and codes of forest practice." ¹⁶⁶

Due to the high proportion of publicly owned forests, "[f]orest and timber resources on private lands . . . have largely escaped public scrutiny and regulation" and "[t]he practice and profession of forestry is primarily focused on public lands." ¹⁶⁷ Even so, due to both the high proportion of public forest ownership, and the fact that both public and private forests are subject to Commonwealth exercises of its "external affairs" power, the Australian national government maintains the constitutional capacity to prevent its limited private ownership of forests from derailing its involvement in international negotiations on forests—in stark contrast to the United States, where the treaty power may not trump subnational regulatory control over the 60% of forests in private ownership. What this ultimately means is that the division of forest ownership between private and public entities does not legally impact the ability of the national government to agree to and implement a climate treaty, because it is not legally constrained by either subnational units of government or private property interests in the exercise of its "external affairs" power.

B. Brazil

1. Constitutional Primacy, National Sharing, and Institutional Enforcement

Prior to the 1988 Brazilian Constitution, which aimed to decentralize forest management, Brazilian forest policy at all levels was administered exclusively by the national government. The national government exercised this authority under the first major forest law in Brazil, the Forest Code of 1965, 169 which provided the

^{165.} Low & Mahendrarajah, supra note 142, at 5.

^{166.} NATIONAL FOREST POLICY STATEMENT, supra note 122, at 11.

^{167.} Lane, *supra* note 96, at 287. Despite the high proportion of public ownership, 44% of public forestland is privately managed, placing the percentage of privately managed land in Australia at approximately 70%. Low & Mahendrarajah, *supra* note 142, at 5.

^{168.} Sofia R. Hirakuri, Can Law Save the Forest?: Lessons from Finland and Brazil 19 (2003), *available at* http://www.cifor.cgiar.org/ publications/pdf_files/Books/Law.pdf.

^{169.} Lei No. 4.771, de 15 de setembro de 1965, CODIGO FLORESTAL [C. FLOR.] [Forestry

general framework for forest laws, established protected forest areas and the process for designating them, and put into place "detailed forest practice guidelines for protected areas and reserves on all forestland in the country." The constitutional authority for managing forests, however, was reallocated in 1988 with the establishment of a new Brazilian constitution.

Unlike the U.S. and Australian constitutions, the Brazilian Constitution contains explicit forestry provisions. Article 225 states that the Brazilian forests are "part of the national patrimony, and they shall be used, as provided by law, under conditions which ensure the preservation of the environment." Article 23 declares that the national, state, and local governments have the power to "preserve the forests," while Article 24 establishes that they may do so with concurrent legislative competence in the area of forest management. Regarding concurrent legislation, Article 24 supposedly limits the national government's role to the "establishment of general principles," and preserves the "supplementary competence of the states" to legislate. Article 24 declares, however, that "[t]he supervenience of a federal law over general rules suspends the effectiveness of a state law to the extent that the two are contrary."

The "supervenience" element of the Brazilian Constitution has proven crucial to defining the true division of forest regulatory authority between the Brazilian national and subnational governments. Scholars interpret the "concurrent legislation" clause in Article 23 to mean that "the federal government has absolute power (plenary power) to establish laws and regulations, and the states and municipalities have only limited power." Indeed, forest policy in Brazil might be characterized as completely "supervened" by the national government. The primary national agency responsible for implementing and enforcing forest laws, the Brazilian Institute of the Environment and Renewable Natural Resources (IBAMA), is said to have adopted the pre-1988 Constitution "centralized administration model" of governance, despite the fact that the 1988 Constitution

Code], D.O.U. de 28.09.65 (Braz.), reprinted in 5 Coleção das Leis 157 (1965), amended by Provisional Measure N° 1.511 of 25 July 1996.

^{170.} Simone Bauch, Erin Sills, Luiz Carlos Estraviz Rodriguez, Kathleen McGinley & Frederick Cubbage, *Forest Policy Reform in Brazil*, 107 J. FORESTRY 132, 134 (2009) (citation omitted), *available at* http://www.fs.fed.us/ global/iitf/pubs/ja_iitf_2009_bauch001.pdf.

^{171.} Article 225 begins by stating: "All have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations." Constituição Federal [C.F.] [Constitution] art. 225 (Braz.).

^{172.} CONSTITUIÇÃO FEDERAL [C.F.] [CONSTITUTION] art. 24 (Braz.).

^{173.} *Id*.

^{174.} Janelle E. Kellman, *The Brazilian Legal Tradition and Environmental Protection: Friend or Foe*, 25 HASTINGS INT'L & COMP. L. REV. 145, 153 (2002). Provisional Measure No. 1511 of July 1996, which was meant to increase forest reserves as well as restrict clear-cutting, is one such example. Provisional Measure N° 1.511 of 25 July 1996. The federal government actually establishes, through the forest code, that clear-cutting is restricted to 20 to 80% of a parcel of land. HIRAKURI, *supra* note 168, at 21. This is very different from the United States, where such regulations are currently the role of state governments.

was designed to facilitate general decentralization of governance. ¹⁷⁵ IBAMA had traditionally regulated all public and private lands, and though new laws have sought to transfer some of that authority to subnational governments, ¹⁷⁶ IBAMA still retains superseding authority over forest resources. ¹⁷⁷ In fact, state and local governments have largely "taken very little or no responsibility for the implementation of forest policy, including enforcement."

Due in part to general principles of constitutional interpretation by the Brazilian judiciary, the 1988 Constitution's legal framework for transitioning to a more decentralized form of forest management has not been very successful. The Brazilian high court, the *Supremo Tribunal Federal* (Supremo Tribunal), has affirmed Brazil's commitment to a more centralized form of federalism than that present in the United States. Unlike the U.S. Supreme Court, the Supremo Tribunal has never invalidated federal legislation for intruding into traditional "reserved" powers of the states, nor has the Supremo Tribunal debated whether its decisions should be governed by federal or state law. ¹⁷⁹ The Supremo Tribunal's more centralized view of federalism results from the fact that "Brazilian Constitutions have granted far greater powers to the federal government than the U.S. Constitution." ¹⁸⁰ As a result, Supremo Tribunal justices have never "assumed the role of protecting states' rights from infringement by the federal legislation." ¹⁸¹

Ultimately, even though there is constitutional concurrence between the national and subnational governments for forest legislation in Brazil—establishing the legal framework for decentralized forest governance—the national government's power to "supervene" subnational authority gives it national constitutional primacy (element 1) over forest management. Recently, however, the Brazilian government has attempted to remedy the problem of subnational governments not capitalizing on their constitutional authority to establish forest policy. New laws aim to transfer the approval and enforcement of forest management plans to state environmental agencies, and both the national and state governments have shown an increased focus on greater subnational involvement in forest regulation. ¹⁸² Given explicit constitutional concurrence over forest policy, and an increased focus on decentralized forest governance, Brazil does maintain a national sharing of constitutional forest policy authority (element 2)—though it has proven slow to come to fruition and the national government "retains much of its traditional command and controls regulatory powers." ¹⁸³

^{175.} HIRAKURI, *supra* note 168, at 19.

^{176.} See Bauch et al., supra note 170, at 135. For example, IBAMA previously required all forest owners to have an approved forest management plan (Plande Manejo Florestal Sustentavel [PMFS]) before harvesting timber, and all harvested timber was required to have a transport authorization to demonstrate that it came from an area with an approved forest management plan. *Id*.

^{177.} See HIRAKURI, supra note 168, at 20.

^{178.} *Id.* (citation omitted).

^{179.} Keith S. Rosenn, Federalism in Brazil, 43 Dug. L. Rev. 577, 584–85 (2005).

^{180.} Id. at 585.

^{181.} Id.

^{182.} Gregersen et al., supra note 20, at 33; Bauch et al., supra note 170, at 135.

^{183.} Bauch et al., supra note 170, at 135.

Despite a high concentration of national government legal authority over forests and the fact that Brazil has some of the most complex forestry laws in the world, Brazil's forest management constitutional provisions have been largely ineffective. 184 Thus, even though Brazil maintains the first two elements facilitating flexibility in global climate negotiations related to forests, lack of institutional enforcement capacity (element 3) has severely impeded actual implementation of environmental constitutional provisions and legislation in Brazil. 185 Scholars argue that "[t]he ineffectiveness of laws alone to protect the environment is nowhere as evident as in the contemporary destruction of the Amazonian . . . forests," 186 and that "[a]ttempts to embody environmental protection clauses in national constitutions, such as Brazil's, do not appear to have appreciably influenced the prevailing bureaucratic culture." ¹⁸⁷ Article 26 of the Brazilian Constitution actually makes destruction of the Amazonian and Atlantic forests a crime under the penal code, ¹⁸⁸ but rarely has this constitutional provision been enforced. ¹⁸⁹ The Brazilian government's own reports demonstrate that "the federal government has failed to enforce forestry regulations in relation to forest management, indicating widespread failure to implement forestry laws." ¹⁹⁰ In 1996, Brazilian government audits found the compliance rate with forest laws to be just 30%, and that "even among the 30% of projects which appeared to fully comply with forest management laws, the management plans were not designed as a tool to produce sustainable timber, but rather as a means to satisfy legal requirements to procure logging permits." ¹⁹¹

The lack of enforcement results largely from prosecutorial inaction, a conservative judicial system, public apathy, general corruption, deficient legal structures, severe budgetary constraints on local governments, ¹⁹² faulty land ownership structures, mistrust of government, ¹⁹³ and other institutional problems. ¹⁹⁴ Thus, in Brazil, even in the presence of explicit forest-protection

^{184.} Id. at 134.

^{185.} See Kellman, supra note 174, at 159. The World Justice Project Rule of Law Index rates Brazil twenty-fourth out of sixty-six countries studied for the absence of corruption, and twenty-seventh out of sixty-six for regulatory enforcement. See WORLD JUSTICE PROJECT, supra note 164, at 47. Brazil also has a negative score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities. MCDERMOTT ET AL., supra note 10, at 43.

^{186.} Emilio F. Moran, *The Law, Politics, and Economics of Amazonian Deforestation*, 1 IND. J. GLOBAL LEGAL STUD. 397, 397 (1994).

^{187.} Benjamin J. Richardson, *Environmental Law in Postcolonial Societies: Straddling the Local-Global Institutional Spectrum*, 11 Colo. J. Int'l Envil. L. & Pol'y 1, 26 (2000).

^{188.} Constituição Federal [C.F.] [Constitution] art. 26 (Braz.).

^{189.} Moran, supra note 186, at 401.

^{190.} HIRAKURI, *supra* note 168, at 2.

^{191.} Id. at 78 (citation omitted).

^{192.} It has been argued that "the Brazilian Constitution ha[s] affirmed the rights of all their citizens to a healthy, stable environment. But these are constitutional provisions disassociated from the funding required for their implementation and can be interpreted as efforts to satisfy international pressure without requiring any practical steps to bring them into action." Moran, *supra* note 186, at 406.

^{193.} HIRAKURI, *supra* note 168, at 51.

^{194.} Id. at 29, 56; Kellman, supra note 174, at 159-60; Moran, supra note 186, at 401.

mandates in the national constitution, the national government is unable to enforce legislation under its broad powers. Without a strong judiciary, financial resources, a culture of enforcement and overall political will, the central government is impeded from guiding forest policy through international mechanisms—though it certainly maintains the constitutional authority to do so. Indeed, "Brazilian environmental agencies, while varying widely in their capacities, have not lived up to the promise of Brazilian environmental law. . . . The result is a profound disconnect between environmental law 'on the books' and environmental law as it operates in practice." Others assert that "[o]n paper, constitutional rights are better protected in Brazil than in virtually any other country," but that "[t]he problem is in the

Scholars have noted that

[e]nvironmentalists had hoped that the Constitution would mark a great advance for environmental protection in Brazil by making environmental concerns a national priority, at least on paper. The Brazilian Constitution attempts to provide a comprehensive approach to environmental protection. Perhaps most importantly, at least rhetorically, is its guarantee of a healthy and stable environment to all Brazilian citizens. The truth, however, is that the 'promise of the amendments' contained in the Constitution has been 'illusory.'

Kellman, supra note 174, at 152 (citing Armin Rosenkranz et al., Rio Plus Five: Environmental Protection and Free Trade in Latin America, 9 GEO. INT'L ENVIL. L. REV. 527, 567 (1997)). A report issued by the Brazilian Institute of Agriculture Research demonstrated that the federal government has failed to enforce forest management regulations, and has thus failed to implement forestry laws. HIRAKURI, supra note 168, at 2. The federal government itself, in 1996, recognized that it had not adequately implemented forest management laws. Id. at 29. Government audits in Brazil in 1996 found the compliance rate with forest laws to be just 30%. Id. at 78. Compare this with a 96% rate of compliance among Finnish timber interests in 1997. Id. Some scholars believe that the lack of enforcement is caused "more by lack of human and financial resources and institutional capacity than by lack of adequate legislation." Lila Katz de Barrera-Hernandez & Alastair R. Lucas, Environmental Law in Latin America and the Caribbean: Overview and Assessment, 12 GEO. INT'L ENVTL. L. REV. 207, 231 (1999). It has also been noted that in Brazil, "it is implementation, rather than policy, that is the problem. . . . [L]ow compliance with existing forest management laws, rather than lack of laws, is often a leading cause of unsustainable forestry practices." HIRAKURI, supra note 168, at 2. Yet other scholars have argued that "Brazilian environmental agencies tend to be among the least powerful agencies in the government. They have difficulty defending policies and administrative actions that run contrary to the priorities of political leaders and other governmental agencies." LESLEY K. MCALLISTER, MAKING LAW MATTER: ENVIRONMENTAL PROTECTION AND LEGAL INSTITUTIONS IN BRAZIL 41 (2008).

195. MCALLISTER, *supra* note 194, at 55–56. As a further example, scholars have noted that Provisional Measure No. 1511, passed in July 1996 in order to increase forest reserves and restrict clear-cutting, "impose[s] stricter requirements on paper, [but] are not routinely enforced and represent merely temporary measures rather than long-standing environmental change." Kellman, *supra* note 174, at 156. For further discussion on how judicial deficiencies, lack of education and training for the citizenry, financial, and other societal constraints hamstring enforcement of environmental laws in Brazil, see *id.* at 160–64.

196. Keith S. Rosenn, *Judicial Review in Brazil: Developments Under the 1988 Constitution*, 7 Sw J. L. & TRADE AM. 291, 318 (2000).

disturbing distance that separates the rights inscribed on paper from their effective exercise, and above all in the guaranty of their exercise in practical life." ¹⁹⁷

Though Brazil retains two key elements conducive to balancing global forest governance with federal decentralized domestic forest policy—national constitutional primacy and national sharing of constitutional authority—lack of institutional enforcement capacity prevents Brazil from being fully capable of effective forest policy at either end of the local-global forest governance spectrum. As noted by one scholar, "[t]he case of Brazil . . . highlights the difficulty in designing internationally-binding legal instruments to promote sustainable uses of the earth's resources, and effective enforcement of regulations."

2. Public/Private Forest Ownership

Roughly 25% of Brazil's forests are in public ownership. The remaining 75% are privately owned, or otherwise "unallocated." Article 44 of the *Forest Code* of the Unified Environmental Law in Brazil requires public *and* private property owners to leave intact 80% of Amazonian rainforest areas. These efforts, however, have been largely unsuccessful at addressing private forest destruction. Though the national government has the constitutional authority to avoid the issues faced by the United States in implementing federal policy on private and state-owned lands, entrenched and "archaic" views of private property rights in Brazil still affect the ability of the national government to enforce forest regulation. As noted by one scholar,

[i]ntervention of public authorities in what goes on inside a legally titled property is opposed by the elites who control very large properties, and by others who aspire to someday have them. Even though the Constitution links the right to private property to its 'social function,' this linkage has remained vague in legal terms and unapplied to destruction of vast areas within the private domain of individuals or corporations.²⁰¹

Thus, the high proportion of private forest ownership, as in the United States, affects implementation of forest policy at the national level—it does so, however, due to lack of enforcement, not due to lack of recognized constitutional authority as in the United States. Ultimately, because the national government in Brazil maintains the constitutional authority to regulate both private and public forests, the division of forest ownership between private and public entities does not *legally* constrain the national government in international climate negotiations.

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^{197.} Id. at 318 (citing Carta ao Leitor, Veja, Feb. 1989, at 23 (original in Portuguese)).

^{198.} Moran, supra note 186, at 406.

^{199.} HIRAKURI, *supra* note 168, at 54.

^{200.} Lei N° 4.771, art. 44, de 15 de setembro de 1965, CÓDIGO FLORESTAL [C. FLOR.] [Forestry Code], D.O.U. de 28.09.65 (Braz.), *reprinted in* 5 COLEÇÃO DAS LEIS 157 (1965), *amended by* Provisional Measure N° 1.511 of 25 July 1996. This is an increase from the 50% required in the original 1965 Forest Code. HIRAKURI, *supra* note 168, at 11.

^{201.} Moran, *supra* note 186, at 401.

C. Canada

1. Constitutional Primacy, National Sharing, and Institutional Enforcement

Like the Brazilian Constitution—and unlike the U.S. and Australian Constitutions—the Canadian Constitution Act of 1867 explicitly addresses forest management. Section 92A designates that the exclusive responsibility for nonfederally owned forest legislation, regulation, conservation, and overall management lies with the *provincial* governments. This explicit grant of authority to subnational governments has significant implications for Canada's ability to negotiate any climate treaty prescribing forest management standards, since 84% of forests are nonfederally owned. 202 In addition, the Canadian Constitution, unlike other federal systems here discussed, does not allow concurrent jurisdiction over forests and declares powers either exclusively federal or exclusively provincial.²⁰³ Section 92(13) of the Constitution Act of 1982 reinforces provincial authority over subnational forest management by giving provinces exclusive control over property rights, 204 which Canadian courts have construed broadly to include land use and natural resources management. 205 The 1982 amendments to Canada's constitution place it "beyond dispute that the provinces are primarily responsible for forest management."206 The result of these explicit constitutional provisions is that Canadian forest policy is "extremely decentralized," with national authority over forests being "particularly weak." The national government itself has even stated that "[f]orest management is a matter of provincial jurisdiction. Each province and territory has its own set of legislation, policies and regulations to govern the management of its forests." 208 As a result, the Canadian national government has refused to apply national environmental laws and forest policies or international forest management agreements to the provinces. 209

^{202.} See Canadian Counsel of Forest Ministers, Sustainable Forest Management in Canada 4 (2010), available at http://www.sfmcanada.org/english/pdf/SFMBooklet_E_US.pdf.

^{203.} Paul Stanton Kibel, Canada's International Forest Protection Obligations: A Case of Promises Forgotten in British Columbia and Alberta, 6 FORDHAM ENVIL. L.J. 231, 247 (1995).

^{204.} Constitution Act, 1982, *being* Schedule B to the Canada Act, 1982, c. 11, § 92(13) (U.K.).

^{205.} Kibel, *supra* note 203, at 246.

^{206.} DAVID R. BOYD, UNNATURAL LAW: RETHINKING CANADIAN ENVIRONMENTAL LAW AND POLICY 133 (2003). It should be noted, however, that under the Canadian constitution, the federal government does retain the role of participating in international negotiations "related to the conservation and use of forests." *Id.* at 132.

^{207.} Michael Howlett & Jeremy Rayner, Globalization and Governance Capacity: Explaining Divergence in National Forest Programs as Instances of "Next-Generation" Regulation in Canada and Europe, 19 GOVERNANCE: INT'L J. POL'Y, ADMIN. & INSTS. 251, 265 (2006).

^{208.} Kibel, *supra* note 203, at 246 (citing Canadian Forest Serv., The State of Canada's Forests 1993, at 8 (1994)).

^{209.} Id.

Section 91 of the Constitution, on the other hand, grants the national government exclusive authority over trade and commerce and over "peace, order and good government," which the Canadian Supreme Court construes as including implementation of treaties concerning trade and commerce and other matters of "national concern." Though the national government could perhaps attempt to invoke this constitutional power to justify implementation of international climate and forest agreements, "[t]he Canadian federal government has so far adopted the position that, under the Canadian Constitution, its hands are tied."²¹¹ Indeed, the nearly exclusive control over forest management by the provinces has in the past contributed to Canada's lack of formal participation in international agreements²¹² and has resulted in "constant tensions between the provinces and the federal government over sharing of power" over forests. 213 In other areas of resource management, such as fisheries and agriculture, the federal and provincial governments have resolved management conflicts with a type of "cooperative federalism," which, though not involving a "national sharing of constitutional authority" per se (element 2), involved political and fiscal pressures on the part of the national government to achieve provincial compliance with national policy²¹⁴ an approach that might better be called "uncooperative federalism." However, this approach has yet to manifest regarding forests, almost certainly due to the explicit constitutional provisions vesting exclusive forest management authority in the provinces. Consequently, though scholars have argued that the potential exists for greater federal involvement in forest policy, the Canadian national government, like the U.S. national government, has refused to attempt to extend its authority to non-federal forests. 215

This lack of national constitutional primacy (element 1) negatively affects the interplay between Canadian federalism and international agreements concerning forests, and the Canadian national government is restrained by provincially-reserved powers in the exercise of its treaty power. In other words, "in Canada, the federal government lacks legislative competence to implement treaties whose subject matter falls within provincial jurisdiction"—a scenario similar to the situation in the United States, if not more intractable. In the United States, though *Missouri v. Holland* was certainly narrow, the Supreme Court did not give such definitive treatment to the question of whether federalism principles

^{210.} Id. at 248 (citations omitted).

^{211.} *Id*.

^{212.} Howlett & Rayner, supra note 207, at 268.

^{213.} Gregersen et al., *supra* note 20, at 37.

^{214.} Kibel, supra note 203, at 250.

^{215.} See id. at 249.

^{216.} See Bradley, supra note 7, at 456.

^{217.} Jeffrey L. Friesen, Note, *The Distribution of Treaty-Implementing Powers in Constitutional Federations: Thoughts on the American and Canadian Models*, 94 COLUM. L. REV. 1415, 1416 (1994). This state of affairs arises from the *Labor Conventions* case, where the privy council established that the Canadian federal government may not implement treaties via implementing legislation that intrudes into matters constitutionally reserved to the provinces. 1937 App. Cas. 326 (P.C.) (appeal taken from Canada).

^{218.} See supra notes 85-90.

constrain the treaty power. Furthermore, the situation in Canada presents the polar opposite scenario to that in Australia, where courts have interpreted the Commonwealth government's "external affairs" power quite broadly. After combining the explicit constitutional grant of regulatory authority over forests to the provinces with the fact that the Canadian treaty power is definitively restricted by reserved provincial powers, it becomes clear that Canada is currently even more restricted in international negotiations regarding forests than is the United States. Indeed, "[w]hile the United States Constitution actually contemplates a system that values the importance of the nation's being able to implement its treaties, the Canadian constitutional framework appears to subordinate international concerns to domestic separation of legislative competence." Furthermore, and again unlike U.S. courts, "Canadian courts have consistently extended rather than diminished provincial power." 220

Thus, the Canadian national government, though maintaining institutional enforcement capacity (element 3) as a general matter, ²²¹ currently has neither constitutional primacy over forest management (element 1) nor any resulting national sharing of constitutional forest authority (element 2).

2. Public/Private Forest Ownership

Ninety-three percent of Canada's forests are publicly owned, with provincial governments responsible for regulating both the 7% of privately owned forests and the 77% of forests in provincial ownership. ²²² As a result, the national government only maintains constitutional authority to regulate the 16% of public forests in national ownership. ²²³ Because the provinces are in charge of regulating both private and public forests, ²²⁴ as in the United States, forest ownership may affect the shape of an international climate treaty that includes forests. In Canada, however, it is subnational *public* ownership rather than private ownership that constrains the Canadian national government in treaty negotiations. Subnational constitutional primacy over forests combined with the vast provincial ownership of forests likely means the national government would be legally prohibited from implementing certain potential international forest management obligations on a vast majority of forests within its borders.

^{219.} Friesen, *supra* note 217, at 1433.

^{220.} *Id.* at 1439 (also noting that "proposed constitutional amendments, particularly since 1982, have uniformly sought to vest more power in the provinces at the expense of the central government").

^{221.} The World Justice Project Rule of Law Index rates Canada eleventh out of sixty-six countries studied for the absence of corruption and thirteenth out of sixty-six for regulatory enforcement. WORLD JUSTICE PROJECT, *supra* note 164, at 51. Canada also has a positive score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities. McDermott et al., *supra* note 10, at 43.

^{222.} CANADIAN COUNSEL OF FOREST MINISTERS, supra note 202, at 4–5.

^{223.} Id. at 4.

^{224.} Id. at 5.

D. India

1. Constitutional Primacy, National Sharing, and Institutional Enforcement

Like the Canadian and Brazilian Constitutions, the Indian Constitution explicitly addresses forest protection, with Article 48A declaring that the government "shall endeavor to protect and improve the environment and to safeguard the forests and wildlife of the country."225 Article 51-A(g) states that "[i]t shall be the duty of every citizen of India to protect and improve the natural environment including forests "226 The central government's role over forests has increased over time, and in 1972 the 42nd amendment to the Constitution granted concurrent oversight over forests to the national and state governments, further "empowering the central government to have decisive decision-making authority over management of the nation's forests."227 In the event that national and state legislation clash, as in Brazil, "the Union enjoys a primacy over States in that its legislation in the Union and the Concurrent List prevails over State legislations."²²⁸ The Union capitalized on this recentralization of forest authority by passing the Forest Conservation Act of 1980, 229 which further "increased centralized control by making it mandatory to obtain permission from the central government for converting forest land to non-forest uses."²³⁰ Indeed, the National Forest Policy of 1988²³¹ "is driven by top-down targets, with the national government setting clear objectives" with the goal of achieving forest cover on one-third of the total land area.²³² Thus, it is clear that in India the national government has constitutional primacy over forests (element 1) to act as a fail-safe for forest management.

Despite this strong national constitutional authority, however, India's constitution also incorporates a decentralized approach to forest management—at least on paper—granting a great degree of regulatory authority to its thirty-five state governments. Like Australia, India's governance structure can thus be characterized as the national government purposefully ceding authority via decentralization as a policy choice for improved forest management—thus establishing a framework for national sharing of constitutional forest policy authority (element 2). In fact, India has actually taken its national sharing of

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^{225.} India Const. art. 48A.

^{226.} INDIA CONST. art. 51A(g).

^{227.} Gregersen et al., *supra* note 20, at 55. Article 246 of the Indian Constitution grants concurrent oversight over items listed in "List III" of the Indian Constitution, including forests. INDIA CONST. art. 246(2).

^{228.} SJVN LTD., ENVIRONMENTAL REGULATIONS AND LEGAL FRAMEWORK IN INDIA § 1.2, available at www.sjvn.nic.in/projects/environmental-regulations.pdf.

^{229.} Forest (Conservation) Act, 1980, no. 69, Acts of Parliament, 1980 (India).

^{230.} Gregersen et al., *supra* note 20, at 55; *see* Ministry of Env't & Forests, National Forest Policy Resolution § 4.3.2 (1988), *available at* http://envfor.nic.in/divisions/fp/nfp.htm (India).

^{231.} MINISTRY OF ENV'T & FORESTS, *supra* note 230.

^{232.} Alon Tal & Jessica A. Cohen, *Bringing "Top-Down" to "Bottom-Up": A New Role for Environmental Legislation in Combating Desertification*, 31 HARV. ENVTL. L. REV. 163, 203–04 (2007).

constitutional forest authority further than simply decentralizing to the state government level. The 73rd and 74th amendments to the constitution require states to decentralize forest regulatory authority to even lower levels of government—local governmental units known as "panchayats." The national fail-safe authority operates concurrently with this local authority, as federal agencies continue to mandate policy at the subnational level in areas such as forest fire control and long-term forest management planning. ²³⁴

Ultimately, India's constitutional structure establishes both national constitutional primacy (element 1) and national sharing of constitutional forest policy authority (element 2). The effects of these elements are evident specifically in the context of international treaty making. International agreements have had a direct impact on the forest sector planning process in India—again, at least on paper—signifying that national government adoption of international protocols is not hampered by subnational government interference. ²³⁵

Like Brazil, however, India is missing the key element of institutional enforcement capacity (element 3). Enforcement capabilities are hampered by the budgetary constraints of a developing country and "[i]nadequate resources seriously constrain the implementation of the National Forest Policy." India also ranks low on rule of law and environmental regulatory regime indices, as it struggles with corruption and lack of enforcement. So even though India has a "well-articulated forest policy, its translation into a feasible strategy has been slow." As a result, "[i]nstitutional reform in forestry needs to be pursued with great vigour." So

2. Public/Private Forest Ownership

Ninety-seven percent of all forests in India are publicly owned, and roughly 85% of forests are managed by the state governments.²⁴⁰ Government forests "are managed either directly by state institutions or granted in usufruct to private entities or to communities under a variety of arrangements."²⁴¹ Ultimately, due to the high proportion of publicly owned forests and the national government's constitutional

^{233.} Gregersen et al., *supra* note 20, at 54. In fact, the greater tension in Indian forest regulatory authority seems to be between the state and local governments, rather than between the state and federal governments. *See id.* at 57.

^{234.} Indian Inst. of Forest Mgmt., National Forest Policy Review 120 (2010), available at ftp://ftp.fao.org/docrep/fao/005/AC921E/AC921E04.pdf.

^{235.} *Id.* at 115.

^{236.} Id. at 128.

^{237.} The World Justice Project Rule of Law Index rates India thirty-ninth out of sixty-six countries studied for the absence of corruption, and fifty-second out of sixty-six for regulatory enforcement. WORLD JUSTICE PROJECT, *supra* note 164, at 66. India also has a negative score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities. McDermott et al., *supra* note 10, at 43.

^{238.} INDIAN INST. OF FOREST MGMT., supra note 234, at 129.

^{239.} Id. at 113.

^{240.} Gregersen et al., supra note 20, at 54.

^{241.} Id.

authority to direct management on state-owned forests, the public/private forest ownership divide does not limit India's options in entering into and implementing an international treaty that includes forest management.

E. Russia

1. Constitutional Primacy, National Sharing, and Institutional Enforcement

Russia alone accounts for more than 25% of the standing forests worldwide. 242 The Russian Federation Constitution 243 establishes a hierarchy of legal authorities, with the constitution being the supreme legal authority. 244 Treaties to which the Russian Federation agrees are incorporated into this supreme authority, as Article 15.4 of the constitution declares that "norms of international law and international treaties and agreements of the Russian Federation shall be a component part of its legal system. If an international treaty of the Russian Federation establishes other rules than those stipulated by the law, the rules of the international treaty shall apply." So not only does the national government maintain broad authority to negotiate and implement treaties, but treaties are also constitutionally declared to trump domestic legislation in the event that the two conflict—setting a firm legal foundation for an unconstrained national government in treaty negotiations. 246

The Russian Constitution establishes areas of sole national jurisdiction and areas of joint jurisdiction between the national and subnational governments (known as "subjects"). Article 72 declares that areas of concurrent jurisdiction include "issues of possession, use and disposal of land, subsoil, water and other natural resources . . . land, water, and forest legislation. He Russian Federation's stance on forest policy, however, is that though subject governments may have their own forest legislation, it must not conflict with national forest legislation. This policy, combined with the broad treaty power, clearly establishes national constitutional primacy over forest management (element 1), especially in the context of international agreements. Indeed, the Russian Constitution, distinct from

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^{242.} Natalia V. Malysheva, *Main Features of Russia's Forest Management System, in* The Politics of Decentralization: Forests, People and Power, *supra* note 8, at 229, 230.

^{243.} Konstitutsiia Rossiiskoi Federatsii [Konst. RF] [Constitution] (Russ.).

^{244.} MINNA PAPPILA, INT'L INST. FOR APP. SYS., IR-99-058, THE RUSSIAN FOREST SECTOR AND LEGISLATION IN TRANSITION 2–3 (1999).

^{245.} KONSTITUTSIIA ROSSIISKOI FEDERATSII [KONST. RF] [CONSTITUTION] art. 15.4 (Russ.) (emphasis added).

^{246.} Gennady M. Danilenko, *The New Russian Constitution and International Law*, 88 Am. J. INT'L L. 451, 453, 465–66 (1994).

^{247.} There are eighty-three subnational units of government in Russia, called "subjects." Migara O. De Silva, Galina Kurlyandskaya, Elena Andreeva & Natalia Golovanova, Intergovernmental Reforms in the Russian Federation: One Step Forward, Two Steps Back?, The World Bank (2009), available at https://openknowledge.worldbank.org/bitstream/handle/10986/2668/501730PUB0Inte1IC0di sclosed0Aug0261.txt?sequence=2.

^{248.} Konstitutsiia Rossiiskoi Federatsii [Konst. RF] [Constitution] art. 72 (Russ.).

^{249.} PAPPILA, *supra* note 244, at 21.

other constitutions here reviewed, "confirms the current trend in Russian practice of giving a prominent place to international legal standards in the domestic legal setting." ²⁵⁰

The primary forest legislation in Russia is the Russian Forest Code of 2007. 251 The Code has been credited as a direct attempt by the national government to decentralize Russian forest policy, demonstrating national sharing of constitutional forest policy authority (element 2). 252 Yet it is clear that the Code leaves in place ultimate national control over both public and private forest regulation, as the national government delegates some forest regulatory tasks to the subject governments, but explicitly reserves for itself final authority over forest standard setting. 253 Article 83 of the Forest Code states that the "authorised federal executive body shall have the right to issue enactments on exercising the powers delegated to the public authorities of the Subjects of the Russian Federation, as well as mandatory guidelines and instructions on exercising such powers by the executive authorities of the Subjects of the Russian Federation." 254 The national government must approve the methods by which a subject utilizes delegated authority and must also approve the appointment of subject executive heads exercising delegated powers.²⁵⁵ The national government also oversees legislation passed by subject governments pursuant to their delegated powers, retaining the right to "issue mandatory prescriptions to invalidate enactments of Subjects of the Russian Federation or to amend them," and even maintains the power to "prepare proposals on withdrawal of respective powers from the public authorities of the Subjects" and to have those powers revoked. 256 Areas of forest regulation that in the United States are the role of state and local governments, such as zoning for forestry activities and regulation of clear-cutting, are ultimately administered by federal agencies in Russia. 257 For example, the national government can go so far as to prohibit clearcutting altogether. 258 Thus, governance of forests in Russia has been described as remaining "de facto quite centralized" under its broad national constitutional primacy (element 1), even though it has established the legal framework for decentralized sharing of national constitutional authority (element 2).

^{250.} Danilenko, supra note 246, at 464.

^{251.} LESNOI KODEKS ROSSIIKOI FEDERATSII [LK RF] (Forestry Code) [hereinafter Forest Code], available at http://www.iiasa.ac.at/Research/FOR/forest_cdrom/downloads/Forest_code/ForestCode-3rdReading-061108-eng.pdf.

^{252.} Contreras-Hermosilla, et al., supra note 115, at 10.

^{253.} The federal government maintains primary regulatory authority for various forest activities, such as restrictions on clear-cutting (Article 17), forest uses (Article 27), reforestation (Article 62), development of forest management planning procedures (Article 67), and at least fifty other forest management activities (Articles 81 and 82). Forest Code, *supra* note 251, art. 17, 27, 62, 67.

^{254.} Id. at art. 83-8.

^{255.} Id. at art. 83-9.

^{256.} Id.

^{257.} Id. at art. 15, 17.

^{258.} Id. at art. 17-6.

^{259.} CONTRERAS-HERMOSILLA ET AL., supra note 17, at 3.

Similar to Brazil and India, however, Russia lacks adequate institutional enforcement capacity (element 3), inhibiting the national government's ability to utilize the great degree of *legal* authority it maintains over forest management. ²⁶⁰ This lack is because the "division of powers between the center and subjects is still unclear . . . and administrative competencies are not well defined." ²⁶¹ Specifically in the forest sector, an "[u]nclear hierarchy of laws, division of powers, and contradicting laws affect the credibility" of forest legislation and further complicates implementation of legislation. ²⁶² Overlapping jurisdictions have led to conflicts between national and subject governments, as some subjects "claim that their own constitution is superior to the federal constitution" and that certain areas constitutionally designated as joint jurisdiction are in fact areas of exclusive subject jurisdiction, resulting in inconsistencies in local forest laws and national legislation. ²⁶³

Scholars have recognized that in countries where the central government owns most forest resources, like Russia, central agency control and overall governance of forests is weak, whereas governance is stronger in countries where subnational governments own the resource, like Canada. ²⁶⁴ A causal link between which level of government owns the resource and the quality of management is not necessary to explain that descriptive result, however, as whether the national government maintains institutional enforcement capacity regardless of ownership may be of greater importance. Russia does not maintain such capacity, as its young federation is still battling elements of corruption, unclear constitutional balance and separation of powers, and a weak judiciary. ²⁶⁵ Indeed, the Forest Code of 2007 "appears to undermine Russia's capacity to realise its international legal commitments and

^{260.} The World Justice Project Rule of Law Index rates Russia fifty-first out of sixty-six countries studied for the absence of corruption and fiftieth out of sixty-six for regulatory enforcement. WORLD JUSTICE PROJECT, *supra* note 164, at 90. Russia also has a negative score on the Environmental Regulatory Regimes Index developed by Yale and Columbia Universities. *See supra* note 164.

^{261.} PAPPILA, *supra* note 244, at 5. Also noting that "[t]here are doubts whether Russian federalism really works" and "whether the law-making powers are really clear in Russia." *Id.* at 2.

^{262.} *Id.* at 2.

^{263.} *Id.* at 5. Scholars have noted that "[t]he federal government has no means of prior surveillance of local legislation in order to avoid inconsistencies. The only way to control that regional law does not contradict the Russian Constitution or federal laws is to appeal to the Constitutional Court, which takes approximately five years." *Id.* In addition, Article 78 of the constitution allows the federal executive branch to enter into administrative agreements to transfer powers to subject executives, as long as the transfer does not conflict with the Russian Constitution or federal laws. Though these agreements were intended to make the division of powers between the federal and subject governments more clear, scholars have suggested they have had the opposite effect and have blurred the mandates of the constitution, as in some agreements the federal government has given powers granted to it exclusively by the constitution to subject governments. *Id.* at 6.

^{264.} GREGERSEN ET AL., supra note 20, at 6.

^{265.} Again, these problems are a separate question from whether the central government maintains an adequate constitutional framework, regardless of who controls the resource, to implement important national legislation on forests.

agreements" since it is "convoluted, vague and frequently in contradiction to the sincere efforts by many to realise sustainable forest legal mechanisms for the 21st century." Ultimately, like Brazil and India, Russia maintains elements 1 and 2, and therefore maintains much of what would otherwise provide a sufficient constitutional framework for participating in international climate and forest negotiations as well as retaining the benefits of decentralized forest governance. Yet, lack of element 3 inhibits enforcement of the Russian Federation's constitutional authority.

2. Public/Private Forest Ownership

An overwhelming majority of Russian forests are owned by the national government. Article 9 of the constitution gives the Russian Federation the power to protect land and natural resources "as the basis of the life and activity of the people living in corresponding territories." Whereas the U.S. Supreme Court has ruled that direct land use regulation is a "quintessential state and local power," Article 36 of the Russian Constitution explicitly grants land use regulatory authority to the national government in the area of the environment, stating that private property owners have the right to "possess, utilize, and dispose of land and other natural resources provided that this does not damage the environment and does not violate the rights and legitimate interests of others."

The current Russian Constitution no longer places restrictions on private ownership of property, as it had done in the past, and Article 9 allows land and other natural resources to be in private, state, municipal, and other forms of ownership. Similarly, the 2007 Forest Code now allows for privatization of forest resources. The time of the 1997 Forest Code, private forest ownership was actually illegal, as was subject regulation of private property owners' management of forest resources. The privatization of other forms of property, however, has occurred much more quickly than forest privatization, and though the current forest code allows for privatization, the national government still controls virtually all of the country's forests. Because the national government remains both the primary owner of forests *and* the primary regulator of public and private forest management, forest ownership distribution in Russia is not an impediment to the Russian Federation's ability to enter into and implement a climate treaty aimed at forest management.

^{266.} TAIGA RESCUE NETWORK, COMMENTS ON THE NEW RUSSIAN FOREST CODE 3 (2007), available at http://www.taigarescue.org/_v3/files/pdf/201.pdf.

^{267.} GREGERSEN ET AL., supra note 20, at 41.

^{268.} KONSTITUTSIIA ROSSIISKOI FEDERATSII [KONST. RF] [CONSTITUTION] art. 9 (Russ.).

^{269.} Rapanos v. United States, 547 U.S. 715, 738 (2006).

^{270.} PAPPILA, supra note 244, at 7.

^{271.} Id.

^{272.} TAIGA RESCUE NETWORK, supra note 266, at 1.

^{273.} See PAPPILA, supra note 244, at 8.

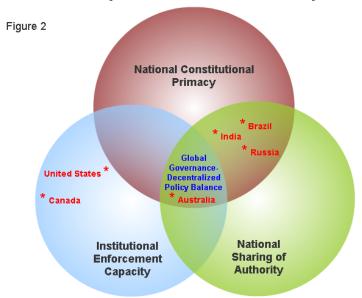
^{274.} Id. at 7-8.

V. SURVEY SUMMARY AND SITUATING FEDERAL CONSTITUTIONAL ORDERS WITHIN THE POLICY FORMULATION/IMPLEMENTATION MATRIX

The foregoing comparative constitutional analysis, as depicted in Chart 1 and Figure 2 below, demonstrates that only Australia maintains all three elements within its constitutional structure that most readily facilitate federal nation-state agreement on the widest range of international negotiations on forests, successful treaty implementation, *and* the preservation of decentralized forest policy-making authority.

| Chart 1 | Elements of Federal Constitutional Structure Most Conducive for Balancing Global Forest Governance With Decentralized Policy-making | | |
|--------------------|--|---|---|
| Federal Nations | 1) National Constitutional Primacy | 2) National Sharing of Constitutional Authority | 3) Institutional Enforcement Capacity |
| Australia | X | X | X |
| India | X | X | |
| Brazil | X | X | |
| Russia | X | X | |
| Canada | | | X |
| United States | | | X |

Current State of the Global Governance/Decentralized Forest Policy Balance in Select Federal Systems



Australia maintains national constitutional primacy (element 1) over both publicly and privately owned forests through its "external affairs" power, yet it shares this authority with the states and territories, as evidenced by the Inter-Governmental Agreement on the Environment, the National Forest Policy Statement, and various Regional Forest Agreements, in order to achieve optimum forest management on local scales (element 2). Australia also maintains sufficient institutional enforcement capacity (element 3), since Australia is not plagued by inadequate legal and enforcement institutions. The Australian national government's control over *all* subnationally owned forests via its "external affairs" power means that the public/private forest ownership divide depicted in Figure 1

does not operate as a significant legal obstacle for international climate and forest negotiations.

Brazil, India, and Russia, meanwhile, maintain only two key elements. Brazil's constitution explicitly establishes national constitutional primacy (element 1) over all subnational forest management through its provisions allowing the "supervenience" of national laws over contrary state laws and the general constitutional deference afforded the national government by Brazilian courts. New laws aimed at transferring approval and enforcement of forest management plans to state environmental agencies, increased focus on greater subnational involvement in forest regulation at both the national and subnational levels, and explicit constitutional concurrence over forest policy also demonstrate a framework of national sharing of forest policy authority (element 2). Brazil, however, is missing the crucial element of institutional enforcement capacity (element 3) because prosecutorial apathy, a weak judiciary, general corruption, deficient legal structures, severe budgetary constraints, and other institutional problems hamper enforcement. In addition, the high proportion of private ownership of forests in Brazil, as in the United States, affects implementation of forest policy at the national level. This effect, however, is due solely to a lack of enforcement, rather than a lack of national government legal authority over private lands, as is the case in the United States. Thus, the constitutional framework is in place for the Brazilian national government to prevent Brazil's high degree of private forest ownership from limiting the range of options in international climate and forest negotiations.

Amendments to the Indian Constitution allowing concurrent oversight over forests and legislative acts passed pursuant to that authority—the Forest Conservation Act of 1980 and the National Forest Policy of 1988—have resulted in national constitutional primacy over forest management (element 1). India also has robust national sharing of constitutional authority (element 2), as its constitution mandates that regional (state) governments must decentralize forest policy making to even lower levels of government. Even so, budgetary constraints, corruption, and other regulatory enforcement issues cause a lack of institutional enforcement capacity in India (element 3). Due to the high proportion of public ownership of forests and the national government's authority to direct management on state and other subnationally owned forests, however, the public/private ownership divide does not negatively affect India's legal capacity to enter into and implement an international climate treaty that includes direct forest management standards.

Russia also maintains national constitutional primacy (element 1), as subject government legislation on forests must not conflict with national mandates, and the Russian Federation has a sweeping treaty power. The Russian Forest Code of 2007 also encapsulates a national sharing of constitutional authority (element 2). Due to a confusing hierarchy of laws, unclear division of powers, and contradictory national and subnational laws, however, Russia lacks adequate institutional enforcement capacity (element 3)—even though national ownership of an overwhelming majority of the forests in Russia causes the public/private forest ownership divide not to be an impediment to the Russian national government during international negotiations.

Canada, like the United States, only maintains one key element: institutional enforcement capacity (element 3). Various provisions of the Canadian Constitution provide *subnational* constitutional primacy over forests, and the Canadian national

government, like the U.S. government, has refused to attempt an extension of its other constitutional powers over nonfederal forests. Subnational primacy over forest policy, combined with the vast subnational ownership of forests, means that the public/private ownership divide in Canada, as in the United States, places a limit the national government's options during international negotiations, as the national government would be constrained in implementing international obligations on a vast majority of forests within its borders.

The preceding review demonstrates that the public/private forest ownership divide presented in Figure 1 only legally constrains the United States and Canada in international negotiations on forests. Even then, the constraint is *a result of* the other axis of analysis shown in Figure 1—that is, the constraint results from the split in national and subnational constitutional authority over forests. Subnational governments maintain constitutional primacy for regulating the majority of U.S. forests, which are privately owned. Similarly, the Canadian Provinces, the regulator with constitutional primacy over all subnationally owned forests in Canada, actually own a majority of the nation's forests. This indicates that the national/subnational primacy divide over decentralized forest governance has the greatest impact on international negotiations of the two axes (see Figure 1).

Recent research establishes a framework for analyzing the consequences of federal systems lacking the above-described elements of forest policy formulation and implementation, with both domestic and international implications. ²⁷⁵ Indeed, the global forest policy/decentralized forest governance elements, though useful descriptors of federal forest-management governance structures, are more properly categorized as subsidiary elements of a new, broader theory of policy design and success. ²⁷⁶ This framework facilitates a more focused study of the drivers of policy failure and the areas of domestic governance upon which attention should be concentrated to improve the policy-making process, including a focus not only on political will, but also on the legal institutions that facilitate policy formulation,

275. See Blake Hudson, Federal Constitutions: The Keystone of Nested Commons Governance, 63 ALA. L. REV. (forthcoming 2012).

276. See generally Pearl Eliandis, Margaret M. Hill & Michael Howlett, DESIGNING GOVERNMENT: FROM INSTRUMENTS TO GOVERNANCE (2005); MICHAEL HOWLETT, DESIGNING PUBLIC POLICIES: PRINCIPLES AND INSTRUMENTS (2011): ALLAN McConnell. UNDERSTANDING POLICY SUCCESS: RETHINKING PUBLIC POLICY (2010); David Marsh & Allan McConnell, Towards a Framework for Establishing Policy Success, 88 J. Pub. Admin. 564 (2010); Allan McConnell, Policy Success, Policy Failure and Grey Areas In-Between, 30 J. Pub. Pol'y 345 (2010). A recurring theme in policy design is that it is often unclear what the aim of policy design should be. Though "design for success" seems like an obvious goal, what are the preconditions of policy "success"? The theory put forth in this section, and to be further developed in future research, sets forth the parameters of successful policy design preconditions. Such a theory furthers McDermott, Cashore, and Kanowski's call for "a new generation of systematic research into forest policy questions" which notes the "value of a new direction for policy studies in general, and global forest policy development in particular." McDermott et al., supra note 10, at 6-7. Such research might "promote a more common global approach to the fundamentals of sustainable forest practices" which can "only help facilitate broader learning and knowledge generation within both practitioner and scholarly communities that is a prerequisite to addressing the continuing loss and degradation of the world's forests." Id. at 7.

such as federal constitutions. Though a great amount of research has been performed on the policy-making process, including the linear progression of agenda setting, policy formation, decision making, implementation, and policy evaluation, ²⁷⁷ scant attention has been given to the overarching framework in which this linear process operates. In other words, a requisite level of institutional and political capacity must be maintained by systems of government before they can engage in linear policy formation that begins with an idea for policy and ends with its successful implementation and evaluation. The requisite level of institutional and political capacity necessary for successful policy formulation and implementation can be represented by a Venn matrix (Figure 3, below) containing four intersecting components: (1) the government's institutional capacity to formulate policy, (2) the government's political will to formulate policy, (3) the government's institutional capacity to enforce policy, and (4) the government's political will to enforce policy.

As the above review demonstrates, governmental systems can contain any combination of these components, but the presence of all four components provides the necessary framework for successful policy making. As seen in Figure 3, at the intersection of institutional capacity to formulate and to enforce, we can say a sufficient policy-making institution exists. At the intersection of political will to formulate and to enforce, we can say that sufficient policy-making political will exists. Similarly, a governmental system may have both institutional capacity and political will to formulate policy, leading to successful policy formulation, or both institutional capacity and political will to enforce, leading to successful policy implementation. When all four are present, the government has achieved a successful policy.²⁷⁸

So where does the study undertaken in this Article of federal constitutional authority to formulate forest policy fall within this matrix? If we define the "institution" for these purposes as constitutional authority at the national level to formulate forest policy, then component 1 of Figure 3 is our focus. Indeed, component 1 of the matrix subsumes element 1 of the global forest governance/decentralized forest policy balance (national constitutional primacy). Without the national government first maintaining the institution of constitutional authority, institutional capacity to enforce, political will to formulate, and political will to implement policy are irrelevant. 279

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^{277.} See Michael Howlett, M. Ramesh & Anthony Perl, Studying Public Policy: Policy Cycles & Policy Subsystems (2009).

^{278.} Of course, whether the policy that "succeeds" is qualitatively "good" or "bad" and whether it fairly represents the will of the entire corpus of civil society rather than merely interest groups or the politically elite is a separate question from whether the fundamental ingredients exist for actual formulation and implementation of a particular policy. Questions of civil society inputs are affected by broader democratic processes and design of governmental structure.

^{279.} At first blush one might consider the Policy Formulation and Implementation matrix also to be a linear process. It may appear that components 3 and 4 cannot exist unless components 1 and 2 first exist. In other words, how can a government enforce and implement a policy that does not yet exist? The resolution of constitutional law questions, however, is quite often nonlinear. Governments may maintain the political will to formulate

Figure 3

Four Components of Policy Formulation and Implementation:

Preconditions for Policy Design and Success

| Institutional Capacity to Formulate | Currential | Political Will to Formulate |
|--|--|--------------------------------|
| 1 | Successful Policy Formulation | 2 |
| Sufficient Institution | Successful Policy | Sufficient Political Will |
| 3 | Successful Policy Implementation | 4 |
| Institutional Capacity to Enforce | | Political Will to Enforce |

Take an illustration from the United States, for instance. The United States offers many examples whereby the Constitution provides federal regulatory authority over some subject matter (component 1), Congress maintains the political will to pass legislation pursuant to that authority (component 2), and the federal government maintains the institutional capacity and political will to enforce that legislation (components 3 and 4). The Clean Air Act (CAA)²⁸⁰ provides one example, passed pursuant to federal Commerce Clause authority over industrial pollutants, and enacted as a result of the strong political will to regulate air pollution during the 1970s. The federal government has further successfully utilized a variety of administrative institutions, such as the Environmental

policy (component 2), *believing* they have sufficient institutional (constitutional) capacity to formulate it (component 1). They may even set up institutions to administer and enforce the policy (components 3 and 4). Even so, sometime later the legislation may be challenged in the courts as unconstitutional. If it is found to be so, then the "retroactive" absence of component 1 renders policy making unsuccessful. Examples are the statutes at issue in the *Lopez* (United States v. Lopez, 514 U.S. 549 (1995)) and *Morrison* cases (United States v. Morrison, 529 U.S. 598 (2000)) where the Court struck down as unconstitutional statutes already passed by Congress and already put into implementation.

^{280.} Clean Air Act, 42 U.S.C. §§ 7401-7671 (2006).

Protection Agency and state agencies, to enforce the CAA and improve national air quality. ²⁸¹

Domestic forest policies, on the other hand, provide a case study of how federal systems can maintain different combinations of policy formulation/implementation components, leading to divergent outcomes regarding a national government's ability to formulate policy as a resource management fail-safe in the event that subnational governments do not adequately manage the resource. As demonstrated above, the Brazilian, Indian, and Russian Constitutions all maintain explicit constitutional provisions related to forest protection, with Brazil in particular maintaining some of the most stringent national-level forest protection mandates in any federal constitution. ²⁸² Thus, each of these systems maintains component 1 (institutional capacity to formulate forest management policy). In addition, each of these federal systems maintains component 2 because each has politically capitalized on its institutional capacity by formulating national forest policy legislation.

Even so, each nation is missing crucial components of policy implementation and enforcement (components 3 and 4, which effectively subsume element 3 in the global forest governance/decentralized forest policy balance). These national governments are unable to enforce legislation passed pursuant to their broad constitutional powers over forests because each is plagued by some implementation/enforcement malady, such as a weak judiciary, lack of financial resources, lack of enforcement culture, corruption, unclear division of powers between different levels of government, and unclear separation of powers between branches of government. National policies will not be successful without these crucial components of policy implementation and enforcement.

The U.S. and Canadian federal systems, on the other hand, present quite the opposite scenario regarding national-level forest policy making, as each maintain sufficient enforcement and implementation capabilities (components 3 and 4), but neither maintains institutional capacity to formulate policy (component 1)—a scenario arising directly out of their chosen forms of constitutional federalism. In the future, the U.S. and Canadian national governments may very well gain the political will to formulate a national forest policy applicable to privately, state, and provincially owned forests (component 2), and may also maintain both the institutional capacity (component 3) and political will (component 4) to enforce such a policy. Yet, the presence of those three components is irrelevant if the constitution does not grant the national government legal authority to formulate policy in the first instance (component 1). Thus, the policy will either never be formulated, or even if it is formulated—and regardless of whether it actually succeeds on the ground—it may be challenged and later held unconstitutional by the courts.

It is lack of institutional capacity to formulate policy—arising out of constitutional structure—that affects not only the ability of federal systems like

^{281.} Of course, the degree of the success can be debated, as some areas of the country remain in nonattainment with the CAA. Even so, there is no doubt that air quality has improved under the CAA.

^{282.} See Constituição Federal [C.F.] [Constitution] art. 23, 24, 225 (Braz.).

those of the United States and Canada to formulate national domestic forest policies, but also prevents their participation in the full range of global forest governance approaches to addressing climate change. It is important to situate the U.S. and Canadian constitutional orders within this policy formulation/implementation matrix so that scholars can undertake a clearer and more focused study of the drivers of law and policy failure, and how those drivers may be adjusted to achieve success—which is the goal of the companion piece of scholarship to this Article, titled Fail-safe Federalism and Climate Change: The Case of U.S. and Canadian Forest Policy. 283

CONCLUSION

Ultimately, we see that in the context of international forest negotiations, the concept that "[f]ederalism and a spirited foreign policy go ill together" need not apply, in a *legal* sense, to countries with all three key elements, like Australia. Countries with the Australian model of constitutional structure maintain the ability, via national constitutional primacy, to enter into an international agreement on forests without concern over potential subnational legal interference. They also have adequate institutional enforcement capacity to ensure implementation, and they voluntarily share forest authority with subnational governments to preserve the benefits of decentralized forest management. This is true within a *legal* sense because whether such countries politically choose to allow federalism to bode ill for their foreign policy is a separate question from whether the legal institution that facilitates political will (the constitution) allows conformation to foreign policy objectives.

Similarly, Brazil, India, and Russia maintain the institutional framework for both national constitutional primacy and national sharing of constitutional authority, but they do not have institutional enforcement capacity. Lack of this element hampers their ability to implement an international agreement and thus may give rise to apathy at the negotiating table and political interference with legal objectives. It also prevents the benefits of decentralized forest governance from being realized.

Without national constitutional primacy over all forests, the United States and Canada will have difficulties engaging fully in global climate change governance and entering into certain types of binding treaties that include forest management, especially ones that mandate particular forms of prescriptive or minimum standard setting regulation. Furthermore, without the sharing of constitutional authority that can flow from national constitutional primacy, the U.S. and Canadian national governments may not effectively balance the benefits of centralized forest management planning with decentralized management domestically.

Scholars have adequately assessed, and are currently exploring, the implications of weak constitutional structure, apathetic judiciaries, corruption, and other institutional problems in countries like Brazil, India, and Russia—governance characteristics that lead to a lack of institutional enforcement capacity on forest

^{283.} Hudson, supra note 103.

^{284.} WHEARE, supra note 2, at 196.

policy (element 3). Scholars, however, have failed to assess how the domestic constitutional orders of countries like the United States and Canada might be adjusted to leave all of the legal and policy response tools on the table for global climate and forest governance. The companion article in this line of research²⁸⁵ undertakes that endeavor and explores both the implications of, and solutions to, the absence of elements 1 and 2 in the United States and Canada. The article explores how the U.S. and Canadian federal constitutional frameworks can be strengthened in order to forge "Fail-safe Federalism". that facilitates more successful negotiation of an international agreement on global forest management and climate change.

The mechanisms for achieving this adjustment can take many forms. ²⁸⁷ Some mechanisms arise directly out of national or subnational initiative and utilize existing constitutional processes, falling within the categories of top-down, horizontal, and bilateral. A top-down approach would allow the national government to gain inputs into subnational forest policy by directly utilizing current constitutional mechanisms, such as constitutional amendment or expanded interpretation of other national government constitutional powers. A bilateral approach would require the national government to provide incentives or disincentives—legislative or otherwise—to subnational governments, encouraging them to voluntarily adopt national standards on forest management related to climate change mitigation. A horizontal approach would involve subnational governments agreeing with other subnational governments to take collective action to address forest management in the context of climate-change mitigation—even in the absence of a top-down mandate (though this approach may still be induced by bilateral incentives). Though a horizontal approach would not result from direct national inputs into subnational forest management standards, it may render the fail-safe role of the national government unnecessary and also create a de facto national constitutional primacy that gives the national government more flexibility during international negotiations related to forests. In other words, the states would voluntarily bind themselves to a position that does not restrain the national government in international negotiations on climate and forests, but that rather reinforces the goals of the global governance regime. And, of course, all three of these approaches may overlap to varying degrees.

Sometimes, however, the internal circumstances within a federal system are not readily conducive to top-down, bilateral, or horizontal mechanisms of adjusting constitutional structure. Other means of achieving those adjustments may arise from external pressures that civil society places on individual governments to take action. These "pathways of transnational impacts" on domestic governance can result in shifts in constitutional structure related to forest management if civil society is able to successfully sustain pressure along each pathway, or along key combinations of pathways. ²⁸⁹

^{285.} Hudson, supra note 103.

^{286.} Id.

^{287.} See id. at Part IV.

^{288.} See id. at Part IV.B.

^{289.} Id.

In the end, one of the approaches outlined above is warranted to adjust constitutional structure in the United States and Canada, as well as perhaps other federal systems not here reviewed—if, that is, these systems place value on international treaty making and global governance to address climate change via utilization of the world's forest. Most federal constitutions provide a "treaty power" in one form or another. As a result, these countries already—at least on paper value global governance to a certain degree, having provided a constitutional tool authorizing the national government to participate in international agreements. Given that federal systems controlling important forest resources maintain constitutional structures that allow subnational governments to constrain international climate change negotiations, the need for creative constitutional methods facilitating effective global environmental governance has never been more apparent. Though regulation of land use activities like private forest management may have historically been the "quintessential" state and local government role, climate change is now the "quintessential" global challenge. Forging national level fail-safes within the constitutional orders of forested federal systems will allow the ultimate source of legal authority in these countries, the constitution, to recognize that which science already does—that local forests have impacts beyond subnational and national political boundaries; impacts felt on the other side of the globe.