

# Drafting Model Laws on Indoor Pollution for Developing and Developed Nations Workshop, July 12-13, 2012, Boulder, Colorado: Introduction

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This Essay introduces the framework for deliberation and legislative drafting undertaken at the workshop: Drafting Model Laws on Indoor Pollution for Developing and Developed Nations on July 12-13, 2012, in Boulder, Colorado. There are a number of fundamental premises upon which the workshop was based, and this Essay refers to the most salient among them.

## *Jurisprudential Foundation*

The first premise lays the jurisprudential foundation for asserting that law, as a normative construct, can and should respond to social problems. The jurisprudential premise underlying such an assertion is that law is an “instrument,” “tool,” “machine,” or “engine” for serving or achieving social objectives. Law in this sense is being used to achieve practical aims.<sup>1</sup> Robert Summers, in discussing the use of the machinery of law to achieve socio-economic objectives, saw it as a particularly American form of legal theory spawned by theorists like Oliver Wendall Holmes, Roscoe Pound, John Dewey, John Chipman Gray, Karl Llewellyn, Walter Wheeler Cook, and Felix Cohen.<sup>2</sup> Summers coined

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1. ROBERT SUMMERS, INSTRUMENTALISM AND AMERICAN LEGAL THEORY 20 (1982).

2. *Id.* at 11; *see generally id.* chs. 2, 12.

the phrase “pragmatic instrumentalism” to describe how these theorists created a theory of adjudication<sup>3</sup> focused on the role of judges in shaping and molding law to achieve social means or ends. The pragmatic instrumentalists relied on courts as instruments or machinery for achieving their goals. Their attention was focused on what judges did when interpreting the written form of a legal text. They contended that judges engaged in interpreting a legal text to ascertain its true meaning cannot do so by a simple parsing of the plain words. Instead, judges should consider and construct their meaning in light of the context of the law as illustrated, for example, by the goals or objectives it was meant to achieve.

In addition to the pragmatic instrumentalists who charted a new theory of adjudication, and “a distinctive type of legal theorizing”<sup>4</sup> in the United States, the use of law for social engineering could trace its jurisprudential lineage to the British philosopher, jurist, and social reformer Jeremy Bentham (1748-1832). Bentham, perhaps best known for his utilitarian philosophy, was also an English legal revolutionary who re-drew the contours of law. In doing so, he recreated a vastly expanded domain of law in a way that had not hitherto been done. He called for a complete, comprehensive, and integrated *legislative* re-envisioning of the existing system of law and government. Bentham expounded the necessity for a new “form” of law that laid the foundations of a reformed society, in which the “whole of the community’s social system no less than the community’s legal system was to be located analytically within the province of legislation.”<sup>5</sup> Moreover, he explicated how to design, draft, implement, and generally use legislation to achieve the social objectives of the new kind of law he was calling for. The vast and theretofore shapeless socio-political expanse envisioned by him had to be legislatively mapped and populated, and become part of a great reformist enterprise based on a new concept of law.

One of the major problems he confronted was that such an expansive and all-embracing concept of law flew in the face of the reality of his day, as reflected in the existing corpus of law, received orthodoxy, and extant legal theory. Legal theory of his time envisioned a minimalist state. For example, William Blackstone, in his masterly *Commentaries on the Laws of England*, first published in 1766, provided a complete

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3. MICHAEL S. MOORE, EDUCATING ONESELF IN PUBLIC: CRITICAL ESSAYS IN JURISPRUDENCE 194 (2000).

4. SUMMERS, *supra* note 1, at 11.

5. DAVID LIEBERMAN, THE PROVINCE OF LEGISLATION DETERMINED 286 (1989).

overview of English law.<sup>6</sup> Sections II and III of Blackstone's Introduction to the *Commentaries on the Laws of England*, "*Of the Study, Nature and Extent of the Laws of England*," offers an overview of the law in general. In this authoritative account of English law, Blackstone divides law into the unwritten common law and written or statutory law. According to Blackstone, "[s]tatutes are either declaratory of the common law or remedial of some defects therein."<sup>7</sup> What is evident is that Blackstone treats the common law as the primary source of law and confines legislation to either declaring the common law or remedying its defects. While the latter conclusion may be interpreted as resembling the expanded concept of legislation called for by Bentham, that is not the case. It is clear from Blackstone's account of written (or statutory) law that it occupied an adjectival or minor position below the foundational common or unwritten law. Common law was primarily, and nearly exclusively, concerned about the private rights of person and property.<sup>8</sup> By contrast, the statute book (statutory law), except in the area of criminal law, was almost bereft of public law such as administrative law, regulation, or governance which dominates the statutory law of the modern state. Blackstone did not favor the creation of a new and expanded realm of statutory law, and neither did Edmund Burke, who was pleased that "the laws reach but a very little," and vehemently disliked expanding its province.<sup>9</sup> Law, clearly, was not seen as an instrument of social engineering as understood in today's terminology.

Bentham set his face to liberating existing law "from the trammels of authority and ancestor-wisdom on the field of law"<sup>10</sup> and of modernizing the legal system through legislation. Bentham expressed contempt for the common law and English judges, and scorned at the idea that the judiciary could transform law and society.<sup>11</sup> A distinguished

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6. WILLIAM C. SPRAGUE, BLACKSTONE'S COMMENTARIES ABRIDGED (9th ed. 1915), available at [http://books.google.com/books?id=zDA0QAAMAAJ&printsec=frontcover&source=gs\\_ge\\_summary\\_r&cad=0#v=onepage&q&f=false](http://books.google.com/books?id=zDA0QAAMAAJ&printsec=frontcover&source=gs_ge_summary_r&cad=0#v=onepage&q&f=false).

7. *Id.* at 15.

8. *Id.* at 10.

9. EDMUND BURKE, *Thoughts on the Cause of the Present Discontents*, in SELECT WORKS OF EDMUND BURKE 69, 99 (E. J. Payne ed., Liberty Fund 1999) (1770) available at [http://files.libertyfund.org/files/796/0005.01\\_Bk.pdf](http://files.libertyfund.org/files/796/0005.01_Bk.pdf).

10. See generally JEREMY BENTHAM, A COMMENT ON THE COMMENTARIES AND A FRAGMENT ON GOVERNMENT 424 n.1 (J. H. Burns & H. L. A. Hart eds., Athlone Press 1977) (1776).

11. JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION (J. H. Burns & H. L. A. Hart eds., Oxford Univ. Press 1996) (1789); JEREMY BENTHAM, OF LAWS IN GENERAL (H. L. A. Hart, ed., Athlone Press 1970).

English judge sums up Bentham's low opinion of judges and lawyers: "As he saw it, in order to enrich themselves, lawyers ensured that English civil justice was ' . . . a system of exquisitely contrived chicanery which maximises delay and denial of justice.' "<sup>12</sup> In Bentham's view, the task of re-designing law was a task for the legislature, not the judges.

What we tried to do at the workshop is based on Benthamite jurisprudence. The workshop drafted model laws that can be enacted by the legislatures of developed and developing countries. Legislatures enacting these model laws will be adopting problem-solving legislative solutions that clearly fall within the compass of law envisioned by Bentham. For example, the model law for developing countries is actually a blueprint for the national dissemination of clean cookstoves. It offers a carefully constructed foundation, which will ensure that the national enterprise of installing cookstoves is successfully undertaken.

Developing nations adopting this model law, or variations of it, will be using the machinery of law to achieve the compelling social objective of combating indoor air pollution and global warming. These are, however, global problems that could be addressed within the broad global enterprise of law that encompasses public international, as well as national, laws. The model laws can be adopted by municipal or national legislatures, as contrasted to treaties or other international law modalities. The main reasons for adopting such a course requires explanation.

Public international law is the law that creates and governs inter-state (or country) relationships, primarily through contracts called treaties, conventions, and protocols. It is possible for the 192 countries in the world to come together as a lawmaking assembly with a goal of negotiating and drafting a global treaty to address indoor air pollution. This is what happened with climate change and biodiversity. Under the international law approach to indoor air pollution, it is also possible for countries to enter into less ambitious regional multilateral treaties restricted to regions identified by trade or geo-politics. It is also possible for one country to enter into a bilateral agreement with another country. Given the ubiquitous nature of indoor air pollution, and the need for both developed and developing country responses, the treaty or public international law track probably calls for a multilateral global treaty.

However, it is becoming evident that large international treaties or conventions of this kind are exceptionally difficult to negotiate, and even

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12. Lord Neuberger of Abbotsbury, *Swindlers (Including the Master of the Rolls?) Not Wanted: Bentham and Justice*, Bentham Lecture 2011 (March 2, 2011) (emphasis in original), *available* *at* [http://www.ucl.ac.uk/laws/alumni/presidents/docs/neuberger\\_11.pdf](http://www.ucl.ac.uk/laws/alumni/presidents/docs/neuberger_11.pdf).

more resistant to implementation and enforcement. Despite tremendous diplomatic- and media-backing, the faltering negotiation of a treaty to replace the Kyoto Protocol is strong evidence of this retreat from large multilateral treaties.

Another way of looking at legal answers to a global problem is through the lens of domestic or municipal legal systems. The numerous developing and least developed countries in the world actually afflicted by indoor air pollution could respond to it through domestic or municipal laws. Many of these countries have other laws dealing with differing aspects of atmospheric pollution, water pollution, and hazardous waste. These laws are enacted by national legislatures, and what the workshop sought to do was expand the ambit of national pollution and health legislation by drafting model laws on indoor air pollution that could be adapted and incorporated into domestic law.

The search for consensus between different legal traditions is not an easy enterprise. Some commentators claim that international treaties and conventions are inevitably and confessedly drafted as multi-cultural compromises between different schemes of law. Consequently, they could be perceived as possessing less merit than the individual legal systems from which they have been derived.<sup>13</sup> Furthermore, it typically takes over a decade to advance from a framework agreement setting out the agenda to the negotiation of protocols requiring collective and specified action.<sup>14</sup>

By contrast, a model law is a legislative text that is recommended to countries for enactment as part of their national or state law, or tribal governance regimes. As the United Nations Commission on International Trade Law describes:

A model law is an appropriate vehicle for modernization and harmonization of national laws when it is expected that States will wish or need to make adjustments to the text of the model to accommodate local requirements that vary from system to system, or where strict uniformity is not necessary or desirable. It is precisely this flexibility which makes a model law potentially easier to negotiate than a text containing obligations that cannot be altered, and can promote greater acceptance of a model law than of a convention dealing with the same subject matter. Notwithstanding

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13. J.S. Hobhouse, *International Conventions and Commercial Law: The Pursuit of Uniformity*, 106 LAW Q. REV. 530, 533 (1990).

14. For example, The United Nations Framework Convention on Climate Change ("UNFCCC") was signed in 1992 and entered into force in 1994. The Kyoto Protocol, negotiated under its aegis, was signed in 1997 and only entered into force in 2005. LAKSHMAN GURUSWAMY, *INTERNATIONAL ENVIRONMENTAL LAW* 215 (4th ed. 2012).

this flexibility, in order to increase the likelihood of achieving a satisfactory degree of unification and to provide certainty about the extent of unification, States are encouraged to make as few changes as possible when incorporating a model law into their legal systems.<sup>15</sup>

At a fundamental level we will be using law to generate private action. For example, the model law uses a needs assessments to find out what the people want; encourages different civil society entities, from entrepreneurs and business entities to non-governmental organizations (“NGOs”), to invest and trade in the fabrication, sale, and servicing of cookstoves; ensures that standards are set and enforced; and solicits international aid and assistance, while establishing a systematic use of monitoring that will ensure that standards are actually being met.

There are compelling reasons as to why national, state, or tribal legal responses to the problems of indoor air pollution should not be handled on an *ad hoc*, country by country approach. To begin, an impressionistic global survey of national laws shows that there are hardly any national laws dealing with indoor air pollution. Second, where they do address them, national laws do so in a fragmentary, incomprehensive manner. Indoor air pollution calls for an integrated and comprehensive approach that covers the bio-physical, socio-political, and economic dimensions of a problem. Third, such domestic laws as they exist reveal considerable disparities, not only in regard to individual provisions and solutions, but also in terms of development and refinement. Finally, national, state, and tribal laws display inconsistencies at different levels with regard to how indoor air pollution should be handled, including the role of markets and stakeholder involvement. Model laws avoid such inconsistencies because they provide a common approach to these problems.

### *The Socio-Biological Problem*

The second premise addresses the facts of the socio-biological problem we confront. The problem we are examining is the relatively unknown but deadly phenomena of indoor air pollution. Between two and three billion people, over a third of the world’s population, and also its poorest, rely upon harmful energy like biomass-generated fire for

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15. U.N. COMM’N ON INT’L TRADE LAW, A GUIDE TO UNICITRAL: BASIC FACTS ABOUT THE UNITED NATIONS COMMISSION ON INTERNATIONAL TRADE LAW 14-15 (2013), available at <http://www.uncitral.org/pdf/english/texts/general/12-57491-Guide-to-UNCITRAL-e.pdf>.

their cooking and heating.<sup>16</sup> These fires are made by burning animal dung, waste, crop residues, rotted wood, raw coal, or other forms of harmful biomass.<sup>17</sup> Depending on the type of fuel and stove being used, indoor air pollution can contain a variety of dangerous pollutants, such as carbon monoxide, nitrous oxides, sulfur oxides, formaldehyde, carcinogens (such as benzene), and small particulate matter.<sup>18</sup> It has been well established by numerous scientific and epidemiological studies that smoke resulting from poor combustion of the biomass used for cooking leads to the premature deaths of two million people per year, primarily women and children, from respiratory infection.<sup>19</sup> Those suffering most from indoor air pollution are located in the poorest parts of the world, earning less than \$1.50 per day, and populate sub-Saharan Africa, parts of land-locked Asia, and swathes of India and China.<sup>20</sup>

It is equally well-proven that the black soot, or carbon, found in the smoke generated by burning biomass is the second largest contributor to global warming (the first being carbon dioxide).<sup>21</sup> We are, therefore, dealing with a global problem of indoor air pollution that leads to very serious health and climatic impacts.<sup>22</sup> One answer is to use a different fuel that does not generate indoor air pollution, but this is extremely difficult because of the scarcity of alternative fuels. The other, more practical and affordable answer, is to use an efficient cookstove that provides good combustion and does not emit harmful black smoke.

We need new laws because existing law and administration is either non-existent or unable to address this challenge. In creating new laws, it behooves us to understand that law is an existing, established social mechanism grounded in reality, and that it must command the acquiescence of the peoples it governs. It is not an idealistic and

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16. INT'L ENERGY AGENCY, WORLD ENERGY OUTLOOK 2006, at 419, 421 (2006), available at <http://www.worldenergyoutlook.org/media/weowebbsite/2008-1994/WEO2006.pdf>.

17. *Id.*

18. WORLD HEALTH ORG., FUEL FOR LIFE 9 (2006), available at <http://www.who.int/indoorair/publications/fuelforlife.pdf>.

19. GWÉNAËLLE LEGROS, INES HAVET, NIGEL BRUCE & SOPHIE BONJOUR, U.N. DEV. PROGRAMME, THE ENERGY ACCESS SITUATION IN DEVELOPING COUNTRIES: A REVIEW FOCUSING ON LEAST DEVELOPED COUNTRIES AND SUB SAHARAN AFRICA 22–23 (2009).

20. WORLD HEALTH ORG., *supra* note 18, at 8, 18, 24.

21. V. Ramanathan & G. Carmichael, *Global and Regional Climate Changes Due to Black Carbon*, 1 NATURE GEOSCIENCE 221, 221 (2008); Robert F. Service, *Study Fingers Soot as Major Player in Global Warming*, 319 SCI. 1745, 1745 (2008).

22. For a more detailed discussion of the human-health and climatic impacts, as well as the economic impacts, see Lakshman Guruswamy, *Energy Justice and Sustainable Development*, 21 COLO. J. INT'L ENVTL. L. & POL'Y 240-46 (2010).

aspirational code of conduct, and must be anchored in social reality and actual human behavior. It tries to change behavior, but should not engage in flights of idealistic fancy.

Third, a good law must satisfy some basic criteria. What are these criteria?<sup>23</sup> To begin, the law should be based upon a correct identification and *diagnosis* of the problem or issue that it purports to address.<sup>24</sup> This calls for the full extent of the problem, in all its complexity, to be accurately identified. “When dealing with a complex challenge, the *diagnostic* dimension of a treaty should recognize and not gloss over the panoply of difficulties presented by it. This is an essential starting point for confronting and addressing those problems.”<sup>25</sup> The model laws published herein present sets of findings, which help in meeting the criteria of correct diagnosis.

Next, following the correct diagnosis, laws “should embody *prescriptions* aimed at the core of the problem, and deal with the sources of the malady.”<sup>26</sup> They should not skirt around the challenge or be directed to symptoms rather than the cause.<sup>27</sup> Prescriptive remedies should accurately target the sources, and the substantial remedies they prescribe should include methods of implementation and compliance.<sup>28</sup> Where behavioral changes are necessary, the law should be directed toward eliciting them.<sup>29</sup> In other words, the law should contain methods and mechanisms that facilitate its implementation. As Bentham has pointed out, prescriptions are only good if they are actually carried out. In order to secure the implementation of its prescriptions, legislation should set up concrete institutions, whether governmental or private, and contain details where necessary as to how the law should be administered. Such compliance-securing legal architecture uses methods that both effectively and beneficially impact the problems addressed by them.<sup>30</sup> In the model laws published herein, we have tried to institute some of these social mechanisms.

Another criterion is that the remedies and methods employed by a law “should have a demonstrably beneficial impact on the problem” and help move the country or international community “toward the practical

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23. This Subpart relies upon and re-produces parts of Lakshman Guruswamy, *Judging Treaties*, 101 AM. SOC'Y INT'L L. PROC. 175, 176 (2007).

24. *Id.*

25. *Id.* (emphasis added).

26. *Id.* (emphasis in original).

27. *Id.*

28. *Id.*

29. *See id.*

30. *Id.*



attainment of its goals and objectives.”<sup>31</sup> In the environmental and energy arena, there is a general absence of inquiries about compliance with laws addressing complex problems.<sup>32</sup> Such investigations should involve a number of questions. First, has the law been *implemented*, applied, and executed through administrative action? Second, to what extent have people or the citizenry complied with the law?<sup>33</sup> The real success of a law depends on more than formal legal and administrative compliance; it needs people compliance.<sup>34</sup> Perhaps the most important criteria for determining the success or failure of a law lies in its impact.<sup>35</sup> By impact, I mean the extent to which a law “has solved or made significant steps toward solving the problem it confronted.”<sup>36</sup> The extent of its beneficial impact will depend on the degree to which a law that may contain an accurate diagnosis and good prescriptions actually changes behavior and benefits people.<sup>37</sup> Consequently, the impact of a law “will depend on the nature of its goals or objectives, its methods, and the extent to which it succeeds in changing . . . behavior.”<sup>38</sup> That is why the model law for developing countries requires extensive and continuous monitoring, not just of cookstoves, but also of human health and behavior.

Fourth, a satisfactory legal response to this challenge must begin with an understanding of bio-physical phenomena, the political and social milieu, and the business environment. Good law must incorporate the relevant findings of the physical, natural, social, and political sciences dealing with these issues, within an assimilative, interdisciplinary framework. The bio-physical and socio-political imperatives can give rise to laws enacted within different institutional or legal systems. Yes, all of them are laws, but they function within different socio-political contexts.

Our workshop revised and finalized two preliminary draft model laws: one suitable for adoption by rich (developed) countries, and the other by poor (developing) countries. The model law aimed at developed countries seeks to translate their existing international legal obligations traversing resource transfers and supporting sustainable development to

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31. *Id.*

32. *Id.*

33. *Id.*

34. *See id.* at 177.

35. *Id.*

36. *Id.*

37. *See id.*

38. *Id.*

common but differentiated responsibility, into practical action.<sup>39</sup> This model law aims to facilitate the review and amendment of existing national legislation as well as the adoption of new legislation to implement such obligations.

The model law dealing with developing countries emphasizes their commitment to addressing indoor air pollution with cookstoves and addresses, *inter alia*, findings; a statement of purpose and targets; publicity and communication about the problem; definitions, if needed; quantitative or qualitative monitoring; indoor air pollution standards; technical specifications of cookstoves; allocation of public resources and criteria for deciding; applications for assistance; micro-financing, markets and trade alliances; standards and certifications; administrative machinery; NGO's and faith groups; civil and criminal penalties; and the monitoring of impacts.

The two model laws are legislative texts recommended to nations, states, and tribes for enactment as part of their own law. The model laws embody flexible approaches that can be adapted to the particular circumstances of each country and may involve some trial and error. It is precisely this flexibility that makes a model law potentially easier to negotiate than a text containing obligations cast in stone. Such a non-rigid formulation will promote greater acceptance of a model law than a treaty or convention dealing with the same subject matter.

Based on the practice of the United Nations Commission on International Trade Law ("UNCITRAL"), the International Institute for the Unification of Private Law ("UNIDROIT"), and the American Law Institute ("ALI"), the model laws are accompanied by commentaries or "guides to enactment" setting forth background and other explanatory information to assist governments and legislators in using the text. The guides include, for example, information that would assist states in considering what, if any, provisions of the model law might have to be changed to take into account particular national circumstances. The commentaries also include relevant discussions from the working/drafting groups and matters not addressed in the text of the model law that may nevertheless be relevant to the subject matter of the model law.

After the workshop, the model laws and commentaries were edited by a special editorial team and offered to the *Colorado Natural Resources, Energy & Environmental Law Review*. The model laws and commentaries are published herein. These materials will also be

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39. These two concepts are unequivocally embodied in Articles 3(1) & 3(4) of the UNFCCC, signed and ratified by all countries including every developed country in the world.

published on our soon to be launched website:  
[www.colorado.edu/theotherthird](http://www.colorado.edu/theotherthird).

Adoption of the model laws by a significant number of countries will draw national and international attention to the problem of indoor air pollution and constitute an effective and much needed legal response to this problem.