A GREENER REVOLUTION: USING THE RIGHT TO FOOD AS A POLITICAL WEAPON AGAINST CLIMATE CHANGE

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I. Introduction

Humans have a definite contributory effect on climate change,¹ a phenomenon that will lie at the root of countless human rights violations over the next few decades. Nevertheless, attempts to create an actionable legal linkage between such violations and the failure of states to reduce greenhouse gasses have been largely ineffective.² To combat this problem, the right to food, as codified in article 11 of the International Covenant of Economic, Social and Cultural Rights ("the Covenant" or "ICESCR")³ and in relevant domestic law, should be

^{1.} See generally the various reports on the scientific bases for anthropogenic climate change produced by the Intergovernmental Panel on Climate Change [IPCC]. Climate Change Assessment Reports, IPCC, http://www.ipcc.ch/publications_and_data/publications_and_data_reports.htm (last visited Sept. 9, 2010).

^{2.} See, e.g., Office of the U.N. High Commissioner for Human Rights, Rep. of the Office of the U.N. High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, ¶ 70, Human Rights Council, U.N. Doc. A/HRC/10/61 (Jan. 15, 2009) [hereinafter OHCHR Report] ("While climate change has obvious [negative] implications for the enjoyment of human rights, it is less obvious whether, and to what extent, such effects can be qualified as human rights violations in a strict legal sense.").

^{3.} Article 11 of the International Covenant on Economic, Social, and Cultural Rights declares:

^{1.} The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international cooperation based on free consent.

^{2.} The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international co-operation, the measures, including specific programmes, which are needed:

⁽a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources:

used by activists, state governments, diplomats, and international organizations as part of a complex approach to entice states to take a proactive stance on climate change. The right to food-based approach is particularly applicable to developing states like Brazil and India in order to focus domestic policy and to encourage greater engagement by such states with international greenhouse gas reduction mechanisms. This Note focuses on states like these.

Further, the right to food should not be used instead of other human rights-based approaches, but rather in concert with them in an effort to ratchet up the pressure on governments to swiftly reduce greenhouse gas emissions and take other actions to mitigate or avoid the worst effects of climate change. This combination of several lines of attack is important both because it mitigates some of the inherent weaknesses of approaches based on single rights, and because it avoids the substantial problem that focusing on any one right risks compromising other rights.⁴ Because the ability to produce food is so strongly tied to climate and environmental conditions, the right to food has an inherently direct relationship with climate change. In essence, if the climate cannot sustain enough agriculture to feed the population, the state may be led to breach its obligations under the right to food. A failure to restrain and reverse climate change would be tantamount to a failure to protect the population's right to food.

In Part II, I briefly outline the effects of climate change on food security and the necessity of a stable growing environment in order to provide enough food for the population. I also highlight the reasons why the right to food is especially applicable in the context of climate change. I then argue that

⁽b) Taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.

International Covenant on Economic, Social, and Cultural Rights, art. 11, opened for signature Dec. 16, 1966, 993 U.N.T.S. 3 [hereinafter ICESCR].

^{4.} For example, too great a focus on a state's right to development may endanger the population's right to food by polluting the growing environment and converting farmland to industrial use. Reciprocally, a focus solely on the right to food might result in underemployment and other harms, leading to a net detriment to society. Though the interrelationship between human rights goes beyond the scope of this Note, it is a subject ripe for further study.

an appropriately expansive, teleological reading of the Covenant creates a strong legal connection between a state's obligations under the right to food and the need to restrain greenhouse gas emissions.

There are, however, substantial problems with an approach based on law alone, as I describe in Part III. Despite the close legal relationship between the environment and a state's ability to fulfill its right-to-food obligations, the likelihood is small that it could motivate a major greenhouse gasemitting state to act. Many governments are either unwilling or unable to take strong measures to ensure the realization of even such basic aspects of the right to food as proper distribution, let alone the more complex environmental obligations contemplated here. To illustrate this point, I look to India, a country that both has acceded to the ICESCR and has strong domestic legal guarantees for the right to food. Practical enforcement of these obligations remains a challenge, however, due in part to government inaction. This is so despite the fact that India has both sufficient food to feed the population and a Supreme Court unafraid to play a highly active role in enforcing the right to food. Since India struggles with implementing court decisions on even basic matters of food security, the expansive construction of the state obligations required by an exclusively legal approach to climate change based on the right to food is likely to be even less successful.⁵ Such an approach demands significant commitment from the legislative and executive branches, and may therefore be impossible to achieve through the judiciary alone.

At the same time, however, the potential that a state might breach its right to food obligations by failing to act can

^{5.} This is especially true given India's hard-line stance on climate change policy, as evidenced by its statements following the Copenhagen COP15 meetings in December 2009. See, e.g., Guarav Singh, India Will Meet its Climate Change Commitment, Ramesh Says, Bloomberg (Jan. 7, 2010), http://www.bloomberg.com/apps/news?pid=20601080&sid=aNWb.M3t0KNI (quoting Jairam Ramesh, India's Minister of State for Environment and Forests, as refusing to undertake obligations beyond voluntary CO₂ reductions); Transcript of A Compromise on Climate Change at Copenhagen, Voice of America News (Dec. 25, 2009), http://www.voanews.com/specialenglish/2009-12-25-voa2.cfm (noting that Jairam Ramesh was proud of the fact that Brazil, South Africa, India and China prevented developed countries from imposing binding commitments at Copenhagen).

be a useful *political* weapon to pressure governments to act on greenhouse gas emissions. Indeed, the right to food may be uniquely positioned in this regard. Cast in terms of food security, the consequences of climate change may seem to the general population more immediate and tangible than the difficult-to-conceptualize predictions of increased global temperature and shifts in weather patterns⁶ that are often cited by climate change experts. If climate change is instead addressed through the lens of food security, activists can point to the visceral image of thousands or millions of starving citizens. This tangibility, in turn, can be used to create substantial political pressure on decision-makers. The approach I discuss here may also be combined with other legal and political arguments as part of a campaign to force states to act on climate change. Used in concert, such approaches will compliment and strengthen one another, making them more difficult for states to resist.

Part IV examines such tactics in some detail, both on the domestic and international level. I argue that there are three distinct, though interrelated, levels of action involved in the political approach: domestic advocacy by civil society groups targeted at regional and national government policy; transnational diplomacy and lobbying to exert pressure across borders; and cooperation between large international institutions to ensure a relatively unified stance on issues of climate change and food security, as well as other human rights questions. Brought together, these layers of advocacy will undoubtedly be more effective than single-issue strategies of the sort pursued thus far,⁷ if only because they will simply prove overwhelming to the target state. In turn, each individual developing state convinced by this approach will undermine the arguments advanced by major emitters like China against binding emissions reductions.⁸ The difficulties in giving effect to such

^{6.} See, e.g., Met Office: Climate Map Shows Impacts of Dangerous Climate Change, MET OFFICE (Oct. 22, 2009), http://www.metoffice.gov.uk/corporate/pressoffice/2009/pr20091022.html (announcing the development of a new map to better illustrate the predicted consequences of sustained increase in global temperature).

^{7.} See OHCHR Report, supra note 2 (discussing human rights obligations implicated by climate change).

^{8.} See, e.g., John Vidal, Climate Deal Blueprint Could Curb U.S. Emissions and Poor Nations' Growth, Guardian.co.uk (June 11, 2010, 15:18 BST), http:/

a complex plan cannot be overstated. Yet with few viable alternatives, activists must organize around a clear figurehead issue; the right to food is precisely that.

II. THE RELATIONSHIP BETWEEN THE RIGHT TO FOOD AND CLIMATE CHANGE

Climate change will affect not only global weather patterns, but also the availability of food and water in many regions of the world. Moreover, the sources of climate change are to a great extent anthropogenic. Given the severity of the impact of climate change on food security and the strong contribution of humans to this phenomenon, one must inevitably ask whether the right to food necessarily leads to an obligation on the part of states to maintain a minimum level of environmental quality and stewardship.

A. The Relationship between the Environment and Food Security¹¹

Anthropogenic greenhouse gas emissions have a marked effect on climate change, altering the balance between incom-

[/]www.guardian.co.uk/environment/2010/jun/11/climate-change-draft-text (noting fears by China, *inter alia*, that hard emissions targets could curb growth).

^{9.} See, e.g., U.N. Env't Programme, The Environmental Food Crisis: The Environment's Role in Averting Future Food Crises, 6-7 (Christian Nellmann et al. eds., 2009) (noting the impact of climate change on global food production); Gerald C. Nelson et al., Int'l Food Policy Research Inst., Climate Change: Impact on Agriculture and Costs of Adaptation 17 (2009) ("[A]griculture and human well-being will be negatively affected by climate change.").

^{10.} See Gabriele C. Hegerl et al., IPCC, Understanding and Attributing Climate Change, in Climate Change 2007: The Physical Science Basis 663, 727-28 (Susan Solomon et al., eds. 2007), available at http://www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html [hereinafter IPCC Physical Science] (discussing anthropogenic evidence for climate change). Despite bad press surrounding the IPCC in early 2010, the vast majority of climate scientists stand behind the findings in its report, aside from the typographical errors regarding the timing of deglaciation in the Himalayas. Christopher Joyce, Confidence in Climate Science Eroding over Errors, NPR (Feb. 22, 2010), http://www.npr.org/templates/story/story.php?storyId=123973664. Among those continuing to support the IPCC's findings is Todd Stern, top climate negotiator for the U.S. State Department. Id.

^{11.} This section is by no means meant to be exhaustive, as a detailed discussion of climate change is far beyond the scope of this Note. For a more intensive analysis of the science behind climate change, see generally

ing and outgoing solar radiation, thereby raising the earth's temperature—a process known as radiative forcing. Since 1750, human activities have contributed far more to radiative forcing than natural phenomena, such as volcanic eruptions. This increase in temperature both represents a symptom of climate change and contributes to other processes, for example by warming the oceans, melting global ice sheets, and driving up sea levels.

Climate change is likely to affect food security by impacting crop yields directly. Several recent studies have noted that sustained periods of high temperatures¹⁵ and increased atmospheric ozone levels,¹⁶ both of which are associated with greenhouse gas emissions, have a deleterious effect on crop yields. Such effects are likely to depend on geography, with some scholars predicting crop-yield losses topping 30 percent in Central and South Asia,¹⁷ and others predicting large gains

IPCC Physical Science, supra note 10. But see, e.g., S.T. Karnick, Climategate 2010: The Inconvenient Facts About Global Warming, The Heartland Inst. (May 17, 2010), http://www.heartland.org/environmentandclimate-news.org/article/27653/Climategate_2010_The_Inconvenient_Facts_about_Global_Warming.html.

^{12.} Piers Forster et al., IPCC, Changes in Atmospheric Constituents and in Radiative Forcing, in IPCC Physical Science, supra note 10, at 129, 135.

^{13.} Id. at 136-37.

^{14.} See Gabriel Hegerl et al., Understanding and Attributing Climate Change, in IPCC Physical Science, supra note 10, at 663, 705-18 (examining anthropogenic effects of climate change beyond an increase in atmospheric temperature).

^{15.} See John R. Porter & Mikhail A. Semenov, Crop Responses to Climatic Variation, 360 Phil. Transactions: Biological Sci. 2021, 2023 (2005) (finding a correlation between high temperatures and reduced cereal crop yields).

^{16.} See Stephen P. Long et al., Global Food Insecurity, 360 Phil. Transactions: Biological Sci. 2011, 2016 (2005) (arguing that traditional models overestimate future global food production because they fail to account for crop yield decreases due to heightened levels of atmospheric ozone).

^{17.} Rex Victor Cruz et al., IPCC, Asia, in Climate Change 2007: Impacts, Action, Vulnerability, 469, 479 (M.L. Parry et al. eds., 2007), available at http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-chapter10. pdf [hereinafter IPCC Asia] ("Crop yields could. . .decrease up to 30% in Central and South Asia even if the direct positive physiological effects of CO₂ are taken into account.").

in North America and Russia.¹⁸ Changes to the physical environment, such as reductions to the water supply through deglaciation or shifts in weather patterns, will also have an indirect effect on food security. Glacial retreat is increasingly visible today¹⁹ and will have serious consequences on the availability of fresh water for farming and other uses.²⁰ Shifts in weather will also impact the fresh water supply,²¹ plunging now-fertile areas into droughts²² and floods,²³ thereby further endangering food security.²⁴ While the precise impact of climate change on food security cannot be accurately predicted, being dependent on thousands of variables and the specific prediction model used,²⁵ it is nevertheless certain that green-

^{18.} Günther Fischer et al., Socio-Economic and Climate Change Impacts on Agriculture: An Integrated Assessment, 1990-2080, 360 Phil. Transactions: Biological Sci. 2067, 2074 (2005).

^{19.} IPCC Physical Science, supra note 10, at 5.

^{20.} IPCC ASIA, *supra* note 17, at 493 ("[T]he... Indus, Brahmaputra and other rivers that criss-cross the northern Indian plain could likely become seasonal... as a consequence of climate change...."). But predictions are not uniform. *See, e.g.*, Walter W. Immerzeel et al., *Climate Change Will Affect the Asian Water Towers*, 328 Sci.1382, 1382 (2010) (noting that the Brahmaputra and Indus river basins are most susceptible to reductions of flow, threatening the food security of an estimated 60 million people, but offering a less categorical prognosis than that suggested by the IPCC); *see also* John Briscoe, *India's Water Economy: Bracing for a Turbulent Future* 31-32 (World Bank Draft Report, 2005), *available at* http://go.worldbank.org/QPUTPV5530 (discussing varied impact of deglaciation on water availability due to differences in regional precipitation across the Himalayan glacial system).

^{21.} See K. Krishna Kumar et al., On the Weakening Relationship Between the Indian Monsoon and ENSO, 284 Sci. 2156, 2156 (1999) (noting that India receives the majority of its annual rainfall during monsoon season, and that departure from normal seasonal rainfall can lead to droughts and floods).

^{22.} See, e.g., Himangshu Watts, Weak Indian Monsoon Threatens Farms, Power Supply, Reuters (July 14, 2009), http://www.reuters.com/article/idUS TRE56D3VE20090714 (noting effects of unpredictable monsoon season and resultant drought on Indian agriculture).

^{23.} See IPCC ASIA, supra note 17, at 483-44 (describing the environmental effects of increased droughts and floods brought on by climate change).

^{24.} A distinction must be drawn, however, between climate trends and individual weather events, the latter of which cannot be directly linked to global warming. *See, e.g.*, Press Release, World Meteorological Organization, Summary Statement on Tropical Cyclones and Climate Change (Dec. 4, 2006), *available at* http://www.wmo.int/pages/prog/arep/press_releases/2006/pdf/iwtc_summary.pdf.

^{25.} See, e.g., Nelson et al., supra note 9, at 1-3 (describing the methodology and comparing the results of different climate change models).

house gasses are sure to jeopardize the amount of available food in many areas of the world.

B. Approaching Climate Change through the Lens of Food Security

Activists face a challenge far more daunting than the often vitriolic opposition from climate change skeptics: 26 public perception of risk. To overcome this issue, the threats posed by global warming must be cast in terms that are physically and temporally immediate to the audience, as "[p]eople typically perceive immediate threats as more relevant and of greater urgency than future problems."27 Food security offers just such an opportunity, as it poses a palpable, easily comprehensible threat to individuals around the world. This contrasts starkly with the more abstract threats typically cited in the climate change discourse, such as melting glaciers or alterations in weather patterns. To be sure, these events are monumental in significance, yet it is left to the audience to divine their impact on everyday life. Framing climate change through the lens of food security, however, makes an easily perceived logical connection between continued greenhouse gas emissions and an issue that is more readily understood by the lay person: reductions in available food, rapid increases in food prices, and an immediate and widespread impact on quality of life. By creating a strong visual image of starvation that the voters and the political leadership can connect to climate change, activists may be able to tap into survival instincts, calling up a more concerted, proactive response to the threat.

The right to food is an expression of the responsibilities and obligations of states toward the individuals who bear the brunt of food security issues; as such it represents a useful tool to convey voters' expectations regarding food security to policymakers. As will be explained in this Note, it may therefore be used on various levels of political and legal discourse to pressure national governments into acting on climate change,

^{26.} For an example of climate change skepticism, see generally Paul MacRae, False Alarm: Global Warming – Facts Versus Fears (2010).

^{27.} Debika Shome & Sabine Marx, Center for Res. on Envt'l. Decisions, The Psychology of Climate Change Communication: A Guide for Scientists, Journalists, Educators, Political Aides, and the Interested Public 10 (Andria Cimino ed., 2009), available at http://www.cred.columbia.edu/guide/pdfs/CREDguide_full-res.pdf.

lest their continued refusal to reduce emissions lead to violations of the right to food. Thus, the right to food as a legal concept is an integral part of a food security-based argument for greater government action on climate change.

C. The Basic Structure and Legal Content of the Right to Food

1. Scope, Purpose, and Interpretation of the ICESCR

The International Covenant on Economic, Social and Cultural Rights (ICESCR) was drafted in 1966 as a sister text to the International Covenant on Civil and Political Rights, and came into force in January 1976.²⁸ Both instruments were derived from the non-binding principles in the Universal Declaration on Human Rights and were designed to establish concrete legal obligations on the part of states.²⁹

Many of the plausible arguments against using the Covenant as a source of environmental obligations on states parties are based on the structure of the ICESCR itself and on the scope of its provisions. For this reason it is essential to consider briefly the purpose and function of the Covenant to determine whether it is permissible to expand the ICESCR beyond its explicit terms. States opposed to the expansion of the ICESCR to encompass environmental obligations might stress that such concerns go far beyond the scope of the Covenant or other human rights agreements.³⁰ Because of the far-reaching implications of such treaties on the actions of states parties,

^{28.} *Cf.* ICESCR, *supra* note 3, at pmbl. ("[T]he ideal of free human beings enjoying freedom from fear and want can only be achieved if conditions are created whereby everyone may enjoy his economic, social and cultural rights, as well as his civil and political rights. . .").

^{29.} The reasons for the division of the two Covenants go beyond the scope of this Note. For a discussion of the relationship between these two instruments, see generally Henry J. Steiner, Philip Alston & Ryan Goodman, International Human Rights in Context: Law, Politics, Morals 263-370 (3d ed. 2008).

^{30.} Cf. Submission of the U.S. to OHCHR Report, Observations by the United States of America on the Relationship Between Climate Change and Human Rights, ¶12 (2008) [hereinafter U.S. Submission], available at http://www2.ohchr.org/english/issues/climatechange/docs/submissions/USA.pdf ("[N]either the [ICESCR] nor any other universal human rights treaty of which the United States is aware provides for [environment-related] rights. . ."). Note that I use the United States' submission as an example of the critical view of the expansive approach to ICESCR. Of course, as the United States has not ratified the ICESCR, any interpretation of the Cove-

there is strong cause to read them narrowly, both in order to make them more justiciable through the identification of concrete victims, harms, and malefactors, and to avoid unnecessary burdens to the economic and political activities of these countries.

While this argument may seem enticing as a general matter, I suggest here that it is inappropriate when applied to treaties of the category to which the ICESCR belongs—namely broad, multilateral agreements that provide a framework of rights instead of a checklist of obligations. The expansive language of the Covenant itself would be impossible to apply in the same way as a more specific instrument like a bilateral treaty. The ICESCR states as its purpose the eventual "full realization" of economic, social, and cultural rights,31 which are themselves broadly drafted.³² There is simply no logical way to implement these provisions strictly without also reading in certain additional duties, such as environmental minima, that are necessary conditions to fulfilling the rights themselves. Neglecting such obligations would frustrate the Covenant's purpose, suggesting that the ICESCR must be interpreted broadly.³³ While the exhortation of a treaty's purpose is predicated on the notion that the parties intended its provisions to be given effect, it is evident from both the ICESCR's language and its content³⁴ that this is true of the Covenant.

The monitoring and support structure the Covenant establishes through the U.N. Economic and Social Council

nant as containing environmental obligations would have little direct effect for the United States.

^{31.} ICESCR supra note 3, art. 2(1).

^{32.} *See id.* art. 11 (recognizing the "right of everyone to an adequate standard of living. . .including adequate food. . . .").

^{33.} Cf. Vienna Convention on the Law of Treaties, art. 31(1), May 23, 1969, 1155 U.N.T.S. 331 [hereinafter VLCT] ("A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose."). While the VCLT does not apply to the ICESCR, VCLT art. 31 has been recognized as a general-purpose rule of interpretation. See JOHN P. GRANT & J. CRAIG BARKER, ENCYCLOPAEDIC DICTIONARY OF INTERNATIONAL LAW 512-13 (2d ed. 2004).

^{34.} *Cf.* ICESCR *supra* note 3, art. 2(1) (obliging the states parties to the Covenant to achieve "full realization of the rights recognized" therein); *id.* art. 16-22 (establishing a reporting regime for states parties to ensure that they implement the ICESCR's provisions).

(ECOSOC)³⁵ also supports the proposition that the ICESCR was designed to evolve and expand over time. This structure appears much closer to that of "managerial" treaty regimes, which consist of both a treaty and an organ tasked with ongoing supervisory and interpretative roles.³⁶ Generally, the constitutive instruments of managerial treaty regimes are, like the ICESCR, drafted in relatively vague terms, with subsequent institutional practice playing an important role in developing the normative value and content of each provision. Much of this practice comes in the form of responses by treaty bodies to reports from states parties, as well as through the distribution of interpretive statements.³⁷

The Covenant follows this pattern closely, calling on states to submit reports on their actions under the ICESCR³⁸ and noting that recommendations may need to be adopted and further conventions concluded as part of the achievement of economic and social rights.³⁹ A strict reading of such managerial treaties is generally infeasible, as much of the interpretive work is designed to be done through treaty bodies; the complete tools for interpretation are simply not present in the instrument itself. This is true of the Covenant as well.

Further support for the premise that the ICESCR was intended to be read expansively and as flexibly as necessary to meet its purpose comes from the practice of the Committee

^{35.} See id. art. 16-22.

^{36.} See José E. Alvarez, International Organizations as Law-makers 317 (2005) (citing the Human Rights Committee of the International Covenant on Civil and Political Rights [ICCPR] as one example of a "managerial" treaty regime). Although the ICESCR is less explicit regarding reporting processes and procedures than the ICCPR, subsequent Economic and Social Council [ECOSOC] resolutions have generated procedures for the Committee on Economic, Social and Cultural Rights similar to those found in the ICCPR. Compare ICCPR, art. 28, opened for signature Dec. 16, 1966, 1966 U.S.T. 521, 999 U.N.T.S. 171 (establishing the Human Rights Committee) and id. art 40-45 (establishing reporting requirements) with ICESCR, supra note 3, art 16-23 (establishing basic reporting requirements), ECOSOC Res. 1979/43, U.N. Doc. E/RES/1979/43 (May 11, 1979) (establishing a working group of experts to review reports under ICESCR), and ECOSOC Res. 1985/17, U.N. Doc. E/RES/1985/17 (May 28, 1985) (amending procedures of council).

^{37.} See ALVAREZ, supra note 36, at 317 (discussing the supervision and implementation of so-called "living treaties").

^{38.} ICESCR, supra note 3, arts. 16-17.

^{39.} Id. art. 23.

on Economic, Social and Cultural Rights (the Committee), which is the official U.N. body charged with interpreting the Covenant.⁴⁰ The Committee has used its General Comments to define, refine, and in some cases expand the content of the Covenant. For example, General Comment 15 interpreted articles 11 (adequate standard of living) and 12 (right to health) as necessarily containing a right to water, despite the fact that this specific right is not mentioned in the ICESCR.41 The Committee reached this conclusion by considering the centrality of water to other Covenant rights, 42 and by considering the plain language of article 11, which it read as a suggestive, rather than exhaustive, list of the rights necessary for an adequate standard of living.⁴³ While General Comment 15 is not immune to criticism, it nevertheless demonstrates the theoretical capacity of the Covenant to include rights beyond those explicitly enumerated. Additionally, it validates the approach of relying on implication to define the various requirements that must be met to fulfill the goals of the ICESCR—this same approach could be used by the Committee to read minimum environmental standards into the Covenant.

Of course, this argument would be incomplete without addressing the normative weight of the General Comments. As the official, treaty-body interpretation of the Covenant, there is strong evidence that General Comments have authoritative and persuasive weight among states and international organizations alike. For example, courts in South Africa have discussed the General Comments extensively, and in at least one case relied on General Comment 15 as an authoritative interpretation of the ICESCR.⁴⁴ The reports submitted by

^{40.} See supra text accompanying note 36.

^{41.} ECOSOC, Comm. on Econ., Soc. & Cultural Rights, Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: General Comment No. 15 (2002) concerning the Right to Water (arts. 11 and 12 of the International Covenant on Economic, Social, and Cultural Rights), 29th Sess., Nov. 11 - Nov. 29, 2002, ¶ 6, U.N. Doc. E/C.12/2002/11 (Jan. 20, 2003) [hereinafter *General Comment 15*].

^{42.} Id.

^{43.} *Id.* ¶ 3.

^{44.} See, e.g., Mazibuko and Others v. City of Johannesburg and Others 2008 Case No. 06/12865 (Withwatersrand Local Div.) at 12 para. 37 (S. Afr.) (citing General Comment 15), aff'd 2009 (3) SA 592 (SCA), rev'd 2010 (4) SA 1 (CC). Although the Constitutional Court overruled the trial court's judg-

states under the Covenant also suggest that the General Comments have at least some normative force; they indicate that national governments take the General Comments seriously enough to include examples in their reports of efforts to comply with obligations identified by the Committee but otherwise unenumerated in the Covenant.⁴⁵

That states parties use material from the General Comments in their reports is probably due to reliance on the General Comments by the Special Rapporteurs for Food in their investigations and publications.⁴⁶ As a matter of international politics, states would most likely find it easiest to avoid opprobrium for failing to comply with the Covenant by using the same language as the special rapporteurs and the Committee. Finally, the practice of international organizations in adopting the frameworks provided by the General Comments lends further support to notion that these documents are of significant normative value.⁴⁷

Thus, a strict textual argument for the ICESCR is inappropriate on several levels. Based on the practice of the Commit-

ment, the issue of the authoritative weight of General Comment 15 did not come up in the later decision, except to the extent that the Constitutional Court held that the provisions of the Covenant and the General Comments were not relevant to questions of South African constitutional law. *Mazibuko*, 2010 (4) SA 1.

^{45.} See, e.g., ECOSOC, Implementation of the International Covenant on Economic, Social and Cultural Rights: Second Periodic Reports Submitted by Brazil under Articles 16 and 17 of the Covenant, ¶¶ 326-48, U.N. Doc. E/C.12/BRA/2 (Jan. 28, 2008) [hereinafter Brazil Report] (noting compliance specifically with right-to-food framework established in General Comment 12); ECOSOC, Implementation of the International Covenant on Economic, Social and Cultural Rights: Combined Second, Third, Fourth and Fifth Periodic Report Submitted by India under Articles 16 and 17 of the Covenant, ¶¶ 459-63, U.N. Doc. E/C.12/IND/5 (Mar. 1, 2007) [hereinafter India Report] (noting implementation of sanitation and drinking water schemes in rural and urban India).

^{46.} See, e.g., Special Rapporteur on the Right to Food, Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development, ¶¶ 17-19, U.N. Doc. A/HRC/7/5 (Jan. 10, 2008) (by Jean Ziegler) (defining the right to food according to General Comment 12).

^{47.} See, e.g., U.N. Food & Agric. Org., Voluntary Guidelines to Support the Progressive Realization of the Right to Adequate Food in the Context of National Food Security, 6 (2005) [hereinafter FAO, Guidelines] (noting that states have an obligation under the ICESCR to "respect, promote, and protect" the right to food). This formulation echoes General Comment 12. See infra note 68 and accompanying text.

tee, on the practice of states parties and international organizations, and on the text of the Covenant itself as interpreted through the lens of the Vienna Convention on the Law of Treaties, it does not appear to violate the terms of the ICESCR to include obligations beyond those originally enumerated if the former are necessary to the latter.

2. The Legal Content of the Right to Food with Respect to the Environment

ICESCR article 11 contains two separate but related provisions:⁴⁸ the right to adequate food⁴⁹ and the fundamental right to be free from hunger.⁵⁰ The ICESCR provides for progressive realization of each,⁵¹ a term generally recognized to signify moving "as expeditiously as possible towards [the] goal" of full implementation of the right to food.⁵²

The term "adequate" is not defined in the Covenant. General Comment 12, the Committee's interpretation of the right to food, indicates that food must meet the dietary needs of consumers, be free from adverse substances, be culturally acceptable, and be physically and economically available to all parties.⁵³ These requirements are considered to be the "core content" of the right to food,⁵⁴ deviation from which would result in violations of other human rights. The dietary-needs principle, for example, is an important foundation for the rights to work⁵⁵ and to education,⁵⁶ as it becomes impossible to exercise either without sufficient nourishment.

Adequacy is intrinsically linked in the General Comment to the notion of sustainability, implying that food must be "ac-

^{48.} Smita Narula, The Right to Food: Holding Global Actors Accountable Under International Law, 44 Colum. J. Transnat'l L. 691, 706 (2006).

^{49.} ICESCR, *supra* note 3, art. 11(1).

^{50.} *Id.* art. 11(2).

^{51.} *Id.* art. 2(1).

^{52.} ECOSOC, Comm. on Econ., Soc. & Cultural Rights, Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: General Comment No. 12, The Right to Adequate Food, ¶ 14 U.N. Doc. E/C.12/1999/5 (May 12, 1999) [hereinafter General Comment 12].

^{53.} *Id.* ¶¶ 9-13, 18.

^{54.} *Id.* ¶ 8.

^{55.} The right to work is found in the ICESCR, supra note 3, art. 6.

^{56.} The right to education is found in the ICESCR, *supra* note 3, arts. 13-14.

cessible for both present and future generations."⁵⁷ Asbjørn Eide, a former special rapporteur on the right to food, goes even further in his 1987 report, stating that sustainability "implies that the physical . . . environment in which food is procured must be . . . protected from erosion or distortion"⁵⁸ Interpreted in this way, when undertaking to respect the right to food, states must also maintain a level of environmental protection sufficient to ensure the long-term availability of food for the population. Such a reading of the Covenant is supported by the customary canon of interpretation that treaties be interpreted in light of their purpose.⁵⁹ Creating a right to food, the availability and security of which depend on certain environmental conditions, but then not requiring states to maintain those conditions would border on the absurd, as it would render the right to food little more than empty text.

In addition to the right to adequate food, the fundamental right to be free from hunger is enumerated separately in article 11(2), and represents the "core obligation" of states under the Covenant "to take the necessary action to mitigate and alleviate hunger . . . even in times of natural or other disasters." This right may obligate states to avoid depriving other states of their means of subsistence through certain policies or practices. Thus, both parts of the right to food con-

^{57.} General Comment 12, supra note 52, \P 7.

^{58.} Special Rapporteur on the Right to Food, *The New International Economic Order and the Promotion of Human Rights*, ¶ 135, ECOSOC, Comm'n on Human Rights, Sub-Comm'n on Prevention of Discrimination & Prot. of Minorities, U.N. Doc. E/CN.4/Sub.2/1987/23 (July 7, 1987) (by Asbjørn Eide) [hereinafter Eide, *Report*].

^{59.} See VCLT, supra note 33, art. 31(1) ("A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.").

^{60.} General Comment 12, supra note 52, ¶ 6. The reference to "natural or other disasters" in General Comment 12 demonstrates that states remain obliged to fulfill the right to food even in the face of adverse climatic conditions.

^{61.} See Philip Alston, International Law and the Right to Food, in The Right to Food 9, 43-45 (Philip Alston & Katarina Tomasevski eds., 1984) (explaining that article 11 may entail "a duty to consume less in times of general shortages so that even if no surpluses were produced, available supplies could be distributed more equally on a global basis"). Alston enumerates several other potential duties that could be derived from article 11(2)(b); they are not listed here because they are less relevant to the discussion at hand.

tain provisions that could, and indeed must, be read to indicate some level of environmental obligations on the part of state parties.

The specific language of article 11 allocates rights and duties somewhat differently from the standard state-national relationship under traditional human rights law, as its terms do not restrict state obligations to nationals alone. Instead, the states parties "recognize the right of everyone to an adequate standard of living" and the "fundamental right of everyone to be free from hunger."62 That article 11 twice refers to the need for international cooperation in order to realize the right to food⁶³ further suggests that the obligations under this part of the Covenant do not automatically change hands or cease to exist at the state's borders. This builds on and expands the duty to avoid depriving others of access to food, and the related requirement that states regulate non-state actors sufficiently to prevent harm to individuals on both sides of the border.64 In order to comply with this obligation, states must avoid causing environmental harms that impede another state's ability to implement the right to food.

What is more, the Covenant extends certain rights to the states parties themselves, in part as a corollary to the duty of all states to cooperate in implementing the right to food.⁶⁵ The interstate obligations of states have been cited repeatedly by

^{62.} ICESCR, *supra* note 3, art. 11(1)-(2) (emphasis added). *But see* Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, 2004 I.C.J. 136, ¶ 112 (July 9) (noting that the ICESCR extends "both to the territories over which a State party has sovereignty and to those over which that State exercises jurisdiction"). Note, however, that the Court was not directly assessing the extent of the Covenant's scope; it was determining whether international human rights instruments ratified by Israel extended to Israeli territory only, or also to areas over which Israel exercised jurisdiction during conditions of occupation. *Id.* ¶ 102.

^{63.} ICESCR, *supra* note 3, art. 11. Note that the essential role of international cooperation "is not emphasized with respect to any other specific right in the Covenant." Alston, *supra* note 61, at 32.

^{64.} See Alston, supra note 61, at 44-45. See also Special Rapporteur on the Right to Food, Economic, Social, and Cultural Rights: The Right to Food, ¶ 28, ECOSOC, Comm'n on Human Rights, U.N. Doc. E/CN.4/2006/44 (Mar. 16, 2006) (by Jean Ziegler) (stressing the extraterritorial obligation on states parties to avoid actions that cause human rights violations in other states).

^{65.} Alston, *supra* note 61, at 36; *see also* ICESCR, *supra* note 3, art. 2(1) (providing that states take steps though "international assistance and co-operation" to uphold the right to food).

General Comments, U.N. special rapporteurs, and major U.N. reports, ⁶⁶ despite the vocal protests of the United States and other countries. ⁶⁷ While the arguments against the extension of rights to states parties as well as individuals are certainly not without merit, interstate rights make a great deal of sense in this specific context, especially given the trans-border nature of many of the environmental conditions on which the right to food depends, such as water availability.

States are generally recognized as having three basic roles under the Covenant: they must respect, protect, and fulfill the rights set forth in the ICESCR.⁶⁸ Each of these duties arguably includes the maintenance of certain environmental conditions, to the extent that failing to do so would undermine the right to food. The duty to fulfill, as formulated by General Comment 12, is comprised of "an obligation to *facilitate* and an obligation to *provide*."⁶⁹ In other words, when individuals or groups are unable to gain access to adequate food for reasons beyond their control, the state is obligated to fulfill that right.⁷⁰ The state must actively take measures to provide for food security, including to the victims of natural or "other disasters."⁷¹ It is not difficult to see how the duty to fulfill could entail obligations to control or mitigate the effects of environ-

^{66.} See John H. Knox, Climate Change and Human Rights Law, 50 VA. J. INT'L L. 164, 206-07 (2009) (noting adoption of extraterritorial principle by the General Comments, U.N. Special Rapporteurs, and the OHCHR report on climate change and human rights).

^{67.} See id. at 208 nn.210-11 (citing statements by the U.S., Canada, the United Kingdom, France, and others that international cooperation is not a legal obligation under the Covenant).

^{68.} See, e.g., General Comment 12, supra note 52, ¶ 15; Eide, Report, supra note 58, ¶ 66. The "respect, protect, fulfill" formula derived by Eide has since been utilized by numerous activists, scholars, and institutional actors. Examples include: FAO, Guidelines, supra note 47, at 6; G.A. Human Rights Council, Advisory Comm., Requests Addressed to the Advisory Committee Stemming from Human Rights Council Resolutions: Right to Food, 3, U.N. Doc. A/HRC/AC/2/L.2 (Jan. 28, 2009); ECOSOC, Comm. on Econ., Soc. & Cultural Rights, The Maastricht Guidelines on Violations of Economic, Social, and Cultural Rights, ¶ 6, U.N. Doc. E/C.12/2000/13 (Jan. 26, 1997); and Special Rapporteur on the Right to Food, supra note 46, ¶ 19.

^{69.} General Comment 12, supra note 52, ¶ 15.

^{70.} Id.

^{71.} Id.

mental pollution and climate change. Indeed, this is consistent with other portions of the General Comment.⁷²

The duty to respect, which "is essentially a duty of noninterference with existing access to food,"73 also has substantial environmental implications. As Eide puts it, "[t]he obligation to respect requires the State. . . to abstain from doing anything that violates the integrity of the individual or infringes on her or his freedom."⁷⁴ The phrasing of this obligation appears to envision only those actions targeted primarily at food, such as the unnecessary restriction of supplies. Nonetheless, non-interference could easily extend to cover other actions by states or individuals that could impinge on the population's access to food. Environmental degradation from industry can have the same final result—interference with access to food as the theft or hoarding of grain, and it seems arbitrary to empower (or require) states to address one but not the other. If the right to food is to be implemented to the fullest extent possible, states must target environmental damage in the same way as they do other violations of the Covenant.

Finally, proactive environmental measures should be included in the duty to protect. To comply with the duty to protect, General Comment 12 asserts that states must take measures "to ensure that enterprises or individuals do not deprive individuals of their access to adequate food." This level of protection alone, however, cannot be sufficient for a state to comply with its obligations under the right to food. As with the duty to respect, General Comment 12 phrases the obligation to protect as a prohibition on actions directed specifically at access to food, without extending to the knock-on effects of actions like industrial pollution. Yet it would be absurd to require a state to address the affirmative actions of persons

^{72.} See, e.g., id. ¶ 28 (noting that states must take measures to ensure the right to adequate food even in adverse "climatic conditions").

^{73.} Narula, supra note 48, at 708.

^{74.} Eide, Report, supra note 58, \P 67.

^{75.} General Comment 12, supra note 52, ¶ 15; accord Knox, supra note 66, at 170-73 (noting that the state duty to regulate private conduct stems from the obligation to protect).

^{76.} General Comment 12, *supra* note 52, ¶ 15; *see* Eide, *Report*, *supra* note 58, ¶ 68 ("The obligation to protect requires from the State and its agents the measures necessary to prevent other individuals or groups from violating . . . the enjoyment of his material resources.").

without also attending to underlying environmental factors that likely have a far greater effect on food security. While, of course, it would not be beyond the scope of the General Comment's formulation to understand the duty to protect as including measures to prevent or mitigate environmental degradation, it is essential that this obligation be stated clearly to foster compliance with the ecological aspects of the right to food.

In addition to these obligations, which are now widely recognized as a framework for analyzing states' human rights duties,⁷⁷ Eide also recognizes three duties specifically regarding state responses to disasters, lending further support to the requirement of minimum environmental standards.⁷⁸ First, there is the obligation to prevent disasters, which stems from general international legal principles regarding hazardous enterprises.⁷⁹ States must also work to mitigate the impacts of disasters, as well as provide aid to other individuals and states affected by disasters.⁸⁰ This also seems to imply the obligation to prevent anthropogenic environmental degradation from leading to disasters that would affect food availability,⁸¹ an argument that could plausibly be extended to known human contributions to climate change.

The obvious problem with this approach, however, is the complexity of the causal chain with respect to climate change. No individual storm, drought, cold snap, or heat wave—as opposed to other, more obviously man-made disasters like the release of chemicals into the water supply—may be taken to result directly from anthropogenic sources. Under

^{77.} Narula, supra note 48, at 707.

^{78.} See Eide, Report, supra note 58, ¶ 162 (noting a special connection between food availability and ecological degradation); see also U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses, art. 7, U.N. GAOR 51st Sess. Supp. No. 49, U.N. Doc. A/RES/51/229 (July 8, 1997) (setting forth an obligation not to cause significant harm to other states).

^{79.} Eide, *Report*, *supra* note 58, ¶ 164.

^{80.} *Id.* ¶¶ 165-66.

^{81.} Cf. id. ¶ 162 (noting request by World Commission on Environment and Development to develop international declaration on environmental protection).

^{82.} See U.S. Submission, supra note 30, ¶ 18 (emphasizing the attenuated causal chain between human actions, climate change, and violation of human rights).

the broader reading of the principles supported by this paper, this problem is not fatal; human activities remain the but-for cause of climate change in general and must therefore be constrained. Further, control over greenhouse gasses *ex ante* is well within the power of states through standards for automobile fuel efficiency, stationary-source emissions, and large-scale land use practices. For this reason, the right to food is best used proactively, before the harm ensues, as there is simply no practicable way of attributing discrete harms to individual actors or groups.

Thus, states should act to rein in greenhouse gas emissions in an effort to avoid or reduce the damaging effects of climate change on human rights, including the right to food, at least to the extent such effects are foreseeable. The recent Report of the Office of the High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights tentatively reaches this conclusion, noting that "[i]n some cases, States may have an obligation to protect individuals against foreseeable threats to human rights related to climate change. . . . "83 Similar principles have appeared in international declarations such as the 2005 Hyogo Framework, which lists the reduction of the underlying risk factors of natural disasters as a duty incumbent upon states.84 It would be, indeed, absurd to establish a firm connection between a manmade phenomenon like climate change and a violation of rights without forcing states to limit any actions that contribute to that phenomenon.

May states reverse course on the right to food? In other words, may states that have reached a certain level of imple-

^{83.} OHCHR, Report, supra note 2, ¶ 74.

^{84.} World Conference on Disaster Reduction, Kobe, Hyogo, Japan, Jan. 18-22, 2005, Hyogo Framework for Action 2005-2015: Building Resilience of Nations and Communities to Disasters, ¶ 19, U.N. Doc. A/CONF.206/6 (Jan. 22, 2005); accord John Knox, Linking Human Rights and Climate Change at the United Nations, 33 Harv. Envil. L. Rev. 477, 491 (2009) (noting that states have a duty to address the effects of climate change regardless of whether they have contributed to climate change). Cf. Joint Rapporteurs for the OHCHR-UNEP Meeting of Experts, Report of Joint OHCHR-UNEP Meeting of Experts on Human Rights and the Environment, ¶ 31 (Jan. 14-15, 2002), available at http://www.unep.ch/glo/glo%20pages/hr_env%20experts%20meeting %20report%20(revised).pdf (describing sustainable development and the conservation of natural resources as prerequisites for the protection of human rights).

mentation of the right to food deviate downwards, and may any state at any time depart downwards from the minimum core content⁸⁵ of the right to food? The answer to the second question is fairly clear, as the right to food contains an absolute floor, the fundamental right of everyone to be free from hunger,⁸⁶ below which states may not deviate, "even in times of natural or other disaster."

The answer to the first question is somewhat less certain, at least at the outset. The language of the ICESCR implies that the implementation of economic, social, and cultural rights is a one-way street: states are bound to work to "achieve progressively the full realization"88 of the Covenant's rights and towards the "continuous improvement of living conditions,"89 phrases that are both literally and rhetorically weighted towards irrevocable forward progress. The Covenant, however, clearly takes into account "available resources." This term appears in tension with irreversibility, as it seems to apply generally, rather than only to the beginning stages of a country's development. Thus, a state experiencing a decrease in resources might argue that its right-to-food obligations extend only as far as those resources allow. Even with the international aid that states are obligated to provide,91 some departure from established domestic right-to-food norms could be expected.92

This conflict is at least partially resolved by the state obligation inherent in the right to food to mitigate and prevent

^{85.} See infra Section (C)(2).

^{86.} ICESCR *supra* note 3, art. 11(2). *See also* General Comment 12, *supra* note 52, ¶ 6 ("States have a core obligation to take the necessary action to mitigate and alleviate hunger . . . even in times of natural or other disasters.").

^{87.} General Comment 12, supra note 52, ¶ 6.

^{88.} ICESCR, supra note 3, art. 2(1).

^{89.} Id. art. 11(1).

^{90.} Id. art. 2(1).

^{91.} See General Comment 12, supra note 52, ¶ 38 ("States have a joint and individual responsibility . . . to cooperate in providing disaster relief . . . in times of emergency.").

^{92.} Cf. Eide, Report, supra note 58, ¶ 136 ("The balance between [the various components of 'adequacy' as defined by General Comment 12] may be drastically altered during situations of crisis . . ., when the overriding concern may be to keep victims free from overt hunger.").

disasters,⁹³ a category that could include acknowledged, and thus foreseeable, man-made aspects of climate change. The phrasing of the duty to *prevent* (suggesting proactive measures before the onset of the problem), should not be subject to an "available resources" constraint *ex-post*, as this is illogical.⁹⁴ Therefore, states having already attained a certain level of implementation must not use a shrinking resource base as an excuse to deviate downward from that level if the resource depletion is due to factors over which the state had control. Customary international law as codified by the Articles of State Responsibility supports this principle, holding that neither *force majeure* nor necessity may preclude the wrongfulness of a breach of treaty obligations if the situation in question arose from the state's own actions.⁹⁵

Thus, regardless of the "available resources" provision in article 2(1), states must be bound by the ICESCR to ensure a minimum level of environmental security, except in times of unavoidable natural disasters such as earthquakes and volcanic eruptions. Of course, the line between natural and anthropogenic disasters cannot be clearly drawn. The best approach is to treat this obligation as a general principle for state action, rather than as a point to be litigated in court each time a disaster occurs. That said, in order to avoid a situation where the right to food and the environmental norms it implies are rendered meaningless by a massive disaster, it is imperative that states reduce their output of greenhouse gasses—and that they hold each other responsible for ongoing emissions and other activities that might endanger the right to food. 96 As Part III suggests, it may be more effective to rely on political activism and diplomacy, rather than litigation, to move states toward

^{93.} See id. ¶ 164.

^{94.} Indeed, allowing a *post hoc* rationalization for preventable degradation would open so large a loophole in the Covenant as to render it completely meaningless. Were states able to apply such reasoning to excuse themselves from their Covenant obligations, they could purposefully create the conditions in question, allowing them to deviate downward virtually at will.

^{95.} Rep. of the Int'l Law Comm'n, 53rd Sess., Apr. 23-June 1, July 2-Aug. 10, 2001, arts. 23, 25, U.N. Doc. A/56/10; GAOR 56th Sess., Supp. No. 10, (2001).

^{96.} *Cf.* Knox, *supra* note 66, at 211-212 (explaining that international cooperation is necessary to curb global warming, as it is not worthwhile for any single state to unilaterally reduce emissions).

emissions reductions. The legal connection between the climate change and the right to food should be the basis for such action.

III. IMPLICATIONS FOR STRATEGIC ACTIVISM FROM STEPS TAKEN ON THE RIGHT TO FOOD BY DEVELOPING STATES: INDIA VERSUS BRAZIL

India offers a compelling example of the power of civic action to give legal (if not actual) effect to the right to food. Paradoxically, the Indian experience is also an important lesson in how *not* to press for the expansion of rights, especially in the face of competing political concerns such as economic development. India has made promising steps toward fulfilling the right to food: on the international level, it has signed the ICESCR and recently submitted a major report to the Committee; and at home the Supreme Court has been instrumental in developing the contours of the right to food as established by the Indian Constitution. In theory, both of these obligations, either individually or jointly, should give rise to the environmental duties described in Part II.

As I suggest, however, it will likely prove exceedingly difficult for activists to force the Indian government through litigation to move beyond the core responsibilities under the right to food to the environmental conservation measures necessary for food security. Despite its progress, the Indian government has exhibited significant hesitation to take all the steps required to fulfill the population's right to food, even though many parts of India have actually experienced a *surplus* of food over the past decade.⁹⁸ This situation suggests that, no matter how comprehensive the international obligations and how sweeping the court orders, progressive measures like the im-

^{97.} See, e.g., United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3-14, 1992, Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. 1), Annex I (Aug. 12, 1992) (seeking a balance between environmental protection and economic development). The potential conflicts between the "right to development," and the various human rights expressed by the ICESCR and the ICCPR are immensely important, but unfortunately beyond the scope of this Note. While I discuss the issue briefly in Part IV, I suggest here that it presents a fruitful topic for future research.

^{98.} See the discussion of domestic implementation measures, *infra* Part III(B).

plementation of the right to food cannot be completed without a sufficiently sympathetic government.

If a state struggles with the bare essentials of the right to food, such as public food distribution, litigation alone cannot possibly compel the state to enact complex, coordinated measures to combat climate change, which would create a far greater drain on administrative and economic resources. As a counterpoint to the Indian experience of legal activism, I briefly consider the example of Brazil, a country whose experience demonstrates the efficacy of political pressure in attaining government respect for the right to food. While there is a substantial difference between compelling states to fulfill the basic right to food and forcing them to act on climate change, by removing a step from the equation and focusing directly on the executive branch, activists may have a greater chance of attaining their goals than through litigation alone. If sufficient political will can be generated either by politicians themselves or by their constituents based on the legal and factual connection between the right to food and the environment I discuss above, then even in developing nations like India, and even where the government has been heretofore reticent, the right to food can still be a useful tool in the fight against global warming.

A. India's International Commitments on the Right to Food

Having acceded to the Covenant in 1979, India has in theory given its consent to be bound by the various provisions therein. Further, no reservations or declarations on the right to food have been entered by the Indian government, 99 implying that India has at least nominally accepted the full spectrum of international and domestic right-to-food obligations in the ICESCR. The status of the Covenant for India, however, is less than clear. In fact, there is much to suggest that India, like many other countries, considers the ICESCR to be merely

^{99.} Declarations of Government of the Republic of India upon Accession to ICESCR, Apr. 10, 1979, *in* Declarations of the U.N. Staff, Multilateral Treaties Deposited with the Secretary-General, IV.3.5, ST/LEG/SER.E/26, U.N. Sales No. E.09.V.3 (2009). India made reservations only with regard to ICESCR articles 1, 4, 7(c), and 8, and is generally limited to restricting the implementation of these articles in light of relevant portions of the Indian Constitution.

aspirational, without strong, legally binding force. This view could significantly undercut any litigation-based attempt to use the rights expressed by the Covenant as leverage to force India to sign future binding climate change agreements, since the obligation to sign would be based on an instrument viewed by the government to be essentially spineless.

How India views the Covenant can be discerned from its ICESCR implementation reports, since the reports reveal the government's opinion of what it must demonstrate in order to comply with the requirements of article 11 and the General Comments. On Until quite recently, India had fallen quite far behind its reporting schedule, or perhaps suggesting that the government does not take its responsibilities as seriously as one might hope. On a more substantive level, states that consider themselves bound specifically by General Comment 12 in addition to the text of the Covenant itself might be expected to follow this outline closely in their reporting, or order to establish their compliance as clearly as possible. India does not do this, at least not overtly, lending weight to the argument that it considers the General Comments and other Committee documents to be purely advisory in nature.

^{100.} See *supra* Part II for a discussion of these requirements, which include the responsibility to respect, protect, and fulfill, and the obligation to ensure that food be adequately nutritious, free from adverse substances, accessible, available, and culturally acceptable. *See also* General Comment 12, *supra* note 52, ¶¶ 8-13.

^{101.} India has reported only a handful of times in the history of the reporting regime. Its most recent report, issued in 2007, combined what should have been its second, third, fourth, and fifth reports to the Committee. This report was overdue by sixteen years when it was finally filed. See Special Rapporteur on the Right to Food, Addendum to Economic, Social, and Cultural Rights: The Right to Food, ¶ 17, ECOSOC, Comm'n on Human Rights, U.N. Doc. E/CN.4/2006/44/Add.2 (Mar. 20, 2006) (by Jean Ziegler) [hereinafter Special Rapporteur, Right to Food Addendum]. Moreover, it has not yet submitted its Core Document, which provides background information about the state party and its governing structure. U.N. Secretary-General, Note to ECOSOC, Comm. on Econ., Soc. & Cultural Rights on the States Parties to the Covenant and the Status of Submission of Reports, 15, U.N. Doc. E/C.12/39/2 (Sept. 19, 2007). In contrast, Brazil, China, and Russia, generally considered India's peers, have all submitted Core Documents. Id. at 4, 7, 26.

^{102.} See, e.g., Brazil Report, supra note 45, ¶ 348 (noting compliance specifically with the framework established by the Covenant and General Comment 12); see also id. ¶ 326 ("[t]he right to food has been dealt with as a State responsibility, in conformity with the provisions of the [ICESCR].").

India's 2007 report to the Committee takes a somewhat narrow approach to the right to food. 103 Rather than presenting the issue strictly according to the respect-protect-fulfill framework established by General Comment 12 and the Special Rapporteur on the Right to Food, India's report focuses mainly on nutritional adequacy and the provision of food through various state programs. 104 This approach ignores the exhortations in General Comment 12 to concentrate on meeting a range of nutritional adequacy standards based on gender and age, rather than a simple minimum caloric threshold.¹⁰⁵ India's focus on statistics is too reductive, in much the same way as China's most recent report, which dedicates most of its time to covering expenditures on food programs and percentages of arable land in use. 106 India, whether consciously or not, also ignores strong statements by the Special Rapporteur in his 2006 field report regarding the state's obligation to prevent interference with food security from third parties.¹⁰⁷

^{103.} See generally India Report, supra note 45, ¶¶ 340, 342, 346, 348, 351-99 (describing India's efforts with respect to the right to food).

^{104.} See id. ¶¶ 354-57 (focusing on average per capita daily intake of calories, protein, and fat as prime indicators of food adequacy); id. ¶ 359 ("Many other welfare schemes targeting women and children . . . have also been launched for creating awareness about malnutrition and for providing supplementary nutrition.").

^{105.} Compare id. with General Comment 12, supra note 52, \P 6 ("The right to adequate food shall therefore not be interpreted in a narrow or restrictive sense which equates it with a minimum package of calories, proteins and other specific nutrients.") (emphasis in original).

^{106.} ECOSOC, Implementation of the International Covenant on Economic, Social and Cultural Rights, Addendum to the Initial Report Submitted by States Parties under Articles 16 and 17 of the Covenant submitted by the People's Republic of China, ¶¶ 126-44, U.N. Doc. E/1990/5/Add.59 (Mar. 4, 2003) [hereinafter China Report]. As mentioned, Brazil's report hews much more closely to General Comment 12. See supra note 102 and accompanying text. Russia's most recent report does not mention the right to food at all in the section dedicated to Article 11. See ECOSOC, Implementation of the International Covenant on Economic, Social and Cultural Rights, Fifth Periodic Report Submitted by States Parties under Articles 16 and 17 of the Covenant submitted by the Russian Federation, ¶¶ 204-78, U.N. Doc. E/C.12/RUS/5 (Jan. 25, 2010).

^{107.} See Special Rapporteur, Right to Food Addendum, supra note 101, ¶ 45 (noting that continued interference with water access by private companies such as Coca-Cola has gone unchecked by the government). To be fair, the interference by private actors with respect to the right to food was not one of the questions posed to India prior to the 2008 session of the Committee. See

The bulk of India's report deals with the collision of poverty and social status with the right to food, an issue identified both by General Comment 12¹⁰⁸ and the Special Rapporteur's 2006 field report.¹⁰⁹ India's report describes various food distribution schemes¹¹⁰ and targeted programs to address hunger and malnutrition among vulnerable subsets of the population.¹¹¹ While these programs have fallen far short of the lofty tone of the report,¹¹² their existence does indicate movement on the part of India's government towards compliance with the various obligations under article 11 of the ICESCR. Specifically, the programs cited in the report touch on issues of economic availability and meeting the dietary needs of the full

ECOSOC, Implementation of the International Covenant on Economic, Social and Cultural Rights, List of Issues to be Taken up in Connection with the Consideration of the Second, Third, Fourth, and Fifth Periodic Report of India Concerning the Rights Covered by Articles 1 to 15 of the International Covenant on Economic, Social and Cultural Rights, ¶¶ 29-36, U.N. Doc. E/C.12/IND/Q/5 (Sept. 14, 2007).

^{108.} See General Comment 12, supra note 52, ¶¶ 5, 13 (identifying poverty and the lack of economic access to food as being at the root of issues of hunger).

^{109.} See Special Rapporteur, Right to Food Addendum, supra note 101, ¶ 32 (citing cases where people in India were too poor to afford government-subsidized food).

^{110.} India Report, *supra* note 103, ¶¶ 360-72.

^{111.} Id. ¶¶ 373-86.

^{112.} See Special Rapporteur, Right to Food Addendum, supra note 101, ¶¶ 41-46 (noting multiple violations of the right to food and failures by India's government to live up to its obligations to respect, protect, and fulfill); see also ActionAid, Shadow Report on Government of India's II, III, IV, & V Combined Report on ICESCR, ¶ 47 (2008), available at http://www2.ohchr.org/english/ bodies/cescr/docs/cescr40/ActionAid_India.pdf [hereinafter ActionAid, Report] (noting that one program is improperly implemented because of caste discrimination); FoodFirst Information and Action Network, Parallel Report: The Right to Adequate Food in India, 123 (Apr. 2008), available at http:// www2.ohchr.org/english/bodies/cescr/docs/info-ngos/ParallelReport_India_FIAN.pdf [hereinafter FIAN, Report] (concluding that India is unable to combat food insecurity because of, inter alia, pervasive corruption, improper governmental focus on caloric intake instead of nutritional value); National Committee for Human Rights Treaty Monitoring in India, The Problems of Non-Implementation of ESCR Rights in India: The Tribal Dimension, 18-22 (2008), available at http://www2.ohchr.org/english/bodies/cescr/docs/info-ngos/ India-Thetribaldimention-NCHRTM.doc (reporting that many tribal children are starving to death, that India's food distribution programs does not reach the neediest families, and that development is forcing indigenous people from their land).

range of the population,¹¹³ reflecting many of the state responsibilities noted by General Comment 12 and the Special Rapporteur.

Nevertheless, whether these programs have been implemented out of a sense of obligation based on the Covenant, or whether they have another source, is unclear. India's progress towards international compliance may simply be a result of domestic policy. Especially given the strength of the right to food in Indian law, discussed below, it would appear hasty to automatically correlate efforts to combat malnutrition and hunger with a response to the right to food as expressed by the Covenant. Indeed, India's reports exclusively describe efforts taken in conjunction with domestic legislation or its own Constitution.114 The introductory statement by Ambassador Singh, Permanent Representative of India at the Fortieth Session of the Committee on Economic, Social, and Cultural Rights, also reflects this emphasis on domestic obligations. 115 Further, there is no discussion in India's report of any legislation implemented specifically because of India's ICESCR obligations, although the report does mention an example of a law enacted to comply with the WTO Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). 116

^{113.} India Report, *supra* note 45, $\P\P$ 373-86.

^{114.} See, e.g., India Report, supra note 45, ¶ 390 (describing domestic laws that support the right to food, all but one of which predate the Covenant); id. ¶ 398 (domestic land-reform legislation). At least one scholar has argued that India's courts are unwilling to rely on international law, preferring instead to find relevant authority in the Indian Constitution, because they refuse to "accept that the Indian constitutional values fall below international standards." Vijayashri Sripati, Human Rights in India—Fifty Years After Independence, 26 Denv. J. Int'l L. & Pol'y 93, 126 (1997).

^{115.} H.E. Mr. Swashpawan Singh, Ambassador/Permanent Representative of India, Address at the 40th Session of the Committee on Economic, Social and Cultural Rights, ¶ 9 (May 7, 2008), available at http://www2.ohchr.org/english/bodies/cescr/docs/statements/OpeningStatementPRIndia40.doc (noting the "constitutional and legal framework in respect of each of the rights covered in the Covenant as well the steps taken by successive Governments in India for the realization" of economic, social, and cultural rights).

^{116.} India Report, *supra* note 45, ¶ 393. *But see* Daily Rated Casual Labor v. Union of India, A.I.R. 1987 S.C. 2342 (holding that deprivation of equal pay for equal work was contrary to spirit of article 7 of ICESCR), *cited in* D.Y. Chandrachud, *Constitutional and Administrative Law in India*, 36 INT'L J. LEGAL INFO. 332, 333 (2008).

In fact, other than the report itself, there is little direct evidence that India takes its obligations under the Covenant seriously, despite the existence of these food distribution schemes. For the more basic rights that are already protected by domestic law in India, this may matter little. 117 But any ICESCR obligations that are not duplicated in domestic law may be extremely difficult to enforce. Indeed, the first subject of concern in the Committee's concluding observations is the fact that India regards its legal obligations arising under the Covenant as "entirely progressive in nature." 118 Yet, if a legal approach to climate change based on the right to food is to have any traction, it is critical that states do not simply fall into fulfilling their Covenant obligations by virtue of other commitments. They must feel compelled to act by the Covenant and the Committee's interpretation thereof, as it is from these instruments that any environmental duties will be derived.

This attitude raises the concern that international legal pressure on India will be unsuccessful or hard-fought in this area. The evidence that India does not recognize expansive interpretations of Covenant rights and obligations is not unequivocal, and on the whole India's report raises more questions than it answers with respect to the government's view of

^{117.} The Committee's concluding remarks are also somewhat agnostic as to the origin of a state party's compliance, and understandably so, since the Committee values the fact that rights are honored over the reasons why they are honored. For example, the concluding remarks note "with satisfaction" the legislative measures adopted by India to promote economic, social, and cultural rights. Comm. on Econ., Soc. & Cultural Rights, Consideration of Reports Submitted by States Parties Under Articles 16 and 17 of the Covenant: Concluding Observations of the Committee on Economic, Social and Cultural Rights – India, ¶ 4, U.N. Doc. E/C.12/IND/CO/5 (Aug. 8, 2008) [hereinafter Concluding Observations]. Notably, however, India's report does not indicate whether these measures were passed specifically because of obligations under the ICESCR. See, e.g., India Report, supra note 45, ¶¶ 216 (2006 Prohibition of Child Marriage Act), 233 (2005 Protection of Women from Domestic Violence Act), 306 (Constitutional Amendment providing free and compulsory education for children ages 6 to 14).

^{118.} Concluding Observations, supra note 117, ¶ 8. The response of India's government to the concluding observations does not address or refute this point, instead restating various provisions of domestic law that guarantee economic, social and cultural rights. Consideration of Reports Submitted by States Parties Under Articles 16 and 17 of the Covenant: Comments by the Government of India on the Concluding Observations, ¶ 3, U.N. Doc. E/C.12/IND/CO/5/Add.1 (June 9, 2009).

its Covenant obligations. If India does indeed view the Covenant and the interpretations offered by the general comments as less than binding, this could negate attempts to expand article 11 to include minimum environmental standards, since such efforts would likely not be taken seriously by the government.

B. Domestic Implementation of the Right to Food in India

Much of the recent progress towards the realization of the right to food by India has come thanks to path-breaking public-interest litigation in that country's Supreme Court, which has interpreted a broadly phrased right to life in article 21 of the Indian Constitution 119 to include various justiciable obligations. I suggest here that some of the shortcomings of India's stance on the ICESCR, such as the question of whether the Covenant is considered by the government to be binding, are remedied by domestic justiciability. This may breathe more life into the right to food as the basis of a domestic legal argument for action on climate change. As will be discussed, however, even the more robust domestic law on the right to food may not be sufficient to encourage India to sign a binding greenhouse gas-reduction agreement as a legal matter, although it may influence the government's climate change policy.

The expansive reading of article 21 by the Supreme Court has developed over several decades of public interest litigation to include various economic and social rights within the purview of the right to life. ¹²⁰ In 2001, the People's Union for Civil Liberties, a national NGO focusing on civil and human

^{119.} See India Const. art. 21 ("No person shall be deprived of life or personal liberty except as according to procedure established by law.").

^{120.} See, e.g., Francis Coralie Mullin v. Adm'r, Union Territory of Delhi, (1981) 1981 S.C.R. 516 (India) (construing Article 21 to provide for "human dignity and all that goes along with it, namely, the bare necessaries of life such as adequate nutrition, clothing and shelter") (emphasis added). For a discussion of Indian public interest litigation, see generally Upendra Baxi, Taking Suffering Seriously: Social Action Litigation in the Supreme Court of India, in The Role of the Judiciary in Plural Societies 33 (Neelan Tiruchelvam & Radhika Coomaraswamy eds., 1987). But cf. Jayanth K. Krishnan, The Rights of the New Untouchables: A Constitutional Analysis of HIV Jurisprudence in India, 25 Hum. Rts. Q. 791, 815 (2003) (identifying "institutional impediments that prevent claimants from effectively using public interest litigation").

rights issues, commenced an action alleging that the central and state governments had failed in their constitutional obligations to safeguard the right of the people to life and liberty. Namely, according to the petition, the central and state governments were in breach of their obligations for failing to distribute over fifty million tons of surplus grain, ¹²² despite the fact that much of India had been afflicted by a potent drought for several years. This led to conditions of mass starvation, mainly among the 360 million people in India living below the poverty line at the time. ¹²⁴

The response to the Right to Food Case from the Supreme Court has been overwhelming and comprehensive. Since July 2001, the Court has issued over fifty orders to the state and central governments regarding the implementation of several social welfare schemes dealing with food availability. All of the Court's orders have gone to strengthen these various welfare programs or to extend them to a broader section of the population, and arguably the most important order issued yet "[e]ssentially . . . converted the benefits of

^{121.} People's Union for Civil Liberties v. Union of India, Writ Petition (Civil) No. 196 of 2001, Compl. ¶ 25 (April 2001) (citing India Const., art. 21), available at http://www.pucl.org/reports/Rajasthan/2001/starvation-writ.htm; see also id. ¶ 51.2 (citing as grounds for relief the right to "life with dignity"); id. ¶ 51.8 (citing Mullin, (1981) 1981 S.C.R. 516).

^{122.} *Id.* ¶ 18, 51.1.

^{123.} *Id.* ¶ 3.

^{124.} *Id.* The Petition refers to "thirty-six crore" people living in poverty. *Id.* A "crore" is a unit in the Indian numbering system that refers to ten million units. *Indian Numbering System*, WORDIQ.COM, http://www.wordiq.com/definition/Indian_numbering_system (last visited November 3, 2010).

^{125.} For a summary of these orders, see Biraj Patnaik & Spurthi Reddy, Supreme Court Orders on the Right to Food: A Tool for Action app. (2d ed. 2008), *available at* http://www.sccommissioners.org/pdfs/primers/toolforaction.pdf [hereinafter Patnaik & Reddy, Tool for Action].

^{126.} See, e.g., People's Union for Civil Liberties v. Union of India, Writ Petition (Civil) No. 196 of 2001 (India) (interim order May 8, 2002) (ordering implementation of rural job-support program), reprinted in Patnaik & Reddy, Tool for Action, supra note 125, at 58.

^{127.} See, e.g., People's Union for Civil Liberties v. Union of India, Writ Petition (Civil) No. 196 of 2001 (India) (interim order Oct. 29, 2002) (requiring the Central Government to "extend the benefits of [programs providing additional food support to families below the poverty line]... to destitute sections of the population"), reprinted in Patnaik & Reddy, Tool for Action, supra note 125, at 62.

these [public welfare schemes] into legal entitlements." ¹²⁸ The Supreme Court has also exercised its considerable powers to appoint several Commissioners to observe and report on the implementation of its orders. The Commissioners act as an independent investigative body, somewhat akin to the role of a U.N. special rapporteur, conducting oversight missions and site visits, and then reporting back to the Court on implementation efforts. ¹²⁹ A nearly universal feature of the reports is the strident criticism of noncompliant state governments. ¹³⁰

In contrast, the response by the state and central governments to the Right to Food Case and the orders issued by the Supreme Court has thus far been mixed. While there are some indications of forward progress,¹³¹ the Court's own orders,¹³² the commissioners' reports,¹³³ and the concluding observations of the U.N. Committee on Economic, Social and Cultural Rights all demonstrate that full cooperation remains

^{128.} Patnaik & Reddy, Tool for Action, *supra* note 125, at 15.

^{129.} See About Us – SCC – Supreme Court Commissioners – New Delhi, India, Supreme Court Commissioners http://www.sccommissioners.org/aboutus (last visited Sept. 10, 2010) (discussing the Commissioners' role as agents tasked with monitoring the implementation of Supreme Court orders).

^{130.} See, e.g., Comm'rs of the Supreme Court [SCC], Fifth Report of the Commissioners of the Supreme Court 1 (Aug. 2004), available at http://www.sccommissioners.org/pdfs/comreports/5threport.pdf ("At the outset we would like to place on record, the complete lack of seriousness shown by many state governments to the implementation of schemes under review.").

^{131.} See, e.g., Judgment, People's Union for Civil Liberties v. Union of India and Others, Writ Petition (Civil) No. 196 of 2001 (India), ¶¶ 3, 5, 7 (Apr. 22, 2009) (citing various improvements to nutritional and social programs by the central government following Court orders); ActionAid, Report, supra note 112, ¶ 45 (noting the Court's positive impact on the right-to-food situation in India).

^{132.} People's Union for Civil Liberties v. Union of India, Writ Petition (Civil) No. 196 of 2001 (India) (interim order Apr. 20, 2004) ("It is a matter of anguish that despite the lapse of nearly three and half years, the order dated 28th November, 2001 has not been fully implemented."), reprinted in Patnaik & Reddy, Tool for Action, supra note 125, at 73.

^{133.} See, e.g., SCC, Eighth Report of the Commissioners of the Supreme Court: A Special Report on the Most Vulnerable Social Groups and Their Access to Food 9 (Sept. 2008), available at http://www.sccommissioners.org/documents/download/127 (noting the failure of state governments to implement court orders regarding the AAY subsidized grain distribution system).

elusive.¹³⁴ A major concern is the amount of corruption on the part of local officials: some estimates indicate that as much as 36 percent of the food grains distributed to the population were diverted to the black market.¹³⁵

Much as with the ICESCR, such spotty domestic enforcement of the right to food raises significant questions about the potential for advocates to rely on the courts to influence India's climate change policy. Whether the result of government policies favoring other needs like development, or simply of the state's inability to coordinate the substantial efforts required to comply with the Court's orders, 136 the fact that the basic elements of the right to food continue to go unenforced—even with the greater coercive power of the highest domestic court brought to bear on the issue—implies that the far more complex issue of emissions reductions will fare no better through legal action alone. As I suggest in the brief discussion of Brazil that follows, a shift in the government's priorities can make the difference for the sweeping changes in economic and social policies necessary to enact progressive measures like signing internationally binding climate change agreements. The realization that food security, and therefore the basic human right to food, will be implicated if global warming goes unchecked may provide the momentum necessary to alter the state's policies, both through elections and pressure from interest groups and NGOs.¹³⁷ While litigation may form an aspect of political pressure, it is clear from the case of India that judicial action alone is insufficient to effect the necessary change.

^{134.} See Concluding Observations, supra note 117, \P 9 ("The Committee is also concerned by the non-implementation of court decisions by state authorities.").

^{135.} Special Rapporteur, Right to Food Addendum, supra note 101, ¶ 32.

^{136.} I recognize that, if the problem is more one of inability rather than unwillingness, a significant flaw would arise in my thesis—namely that no amount of political pressure can overcome a sheer impossibility. Yet it cannot be that the government is truly unable to act on the right to food, or on climate change, as the main roadblocks at this stage can still be resolved by a shift in national priorities. To be sure, the political will required to bring about such change is difficult to amass, but not impossible.

^{137.} See infra Part IV.

C. Brazil's Domestic Right to Food Program

My purpose here is not to delve deeply into the detailed aspects of Brazil's *Fome zero* (Zero Hunger) program, which has been held up by international organizations like the FAO as a model for successful realization of the right to food.¹³⁸ Rather, this section is intended to highlight an alternative means of realization for complex social programs, like the realignment of government policy on climate change via the right to food. Again, while there are significant differences between the creation of a food-security program for the population and the multiple levels of regulation and reorganization necessary to take a more proactive stance on greenhouse gas emissions, political action remains a far more direct means of attaining such goals. 139 Brazil is in the process of proving this theory correct with regard to the right to food, and the lessons learned in that battle may easily be applied to climate change as well.

The first movements towards realizing the right to food in Brazil were made in the 1990s, through the actions of a civil society movement, which led the government at the time, led by President Fernando Henrique Cardoso, to create the National Food Security Council, known by the Portuguese acronym CONSEA. (CONSEA was first proposed in 1991 by a symbolic "parallel" government headed by President Lula; the proposed Council later became the focal point of civil society activism, leading to its creation two years later. (141 In its initial form, CONSEA was part of a series of broader welfare measures targeted at hunger and other social problems that fol-

^{138.} See generally U.N. Food & Agriculture Org. [FAO], Right to Food: Lessons Learned in Brazil (2007) [hereinafter FAO, Lessons Learned]. For a brief overview of Brazil's Fome zero program, see, for example, FAO, Intergovernmental Working Group on the Elaboration of a set of Voluntary Guidelines for the Realization of the Right to Adequate Food in the Context of National Food Security, Right to Food Case Study: Brazil, IGWG RTFG/INF 4/APP.1 (Feb. 2004), available at http://www.fao.org/righttofood/kc/downloads/vl/en/details/214905.htm [hereinafter FAO, Right to Food Case Study].

^{139.} This is especially true when, as I propose in this Note, a complex strategy to compel governmental compliance joins political action with litigation, diplomacy, and pressure from international organizations.

^{140.} FAO, Right to Food Case Study, supra note 138, at 8.

^{141.} Id. at 19.

lowed the democratization of Brazil in the late 1980s. ¹⁴² It was designed to create a forum for civic participation in policymaking, allowing NGOs to review and comment on draft legislation and other initiatives. ¹⁴³ Despite the efforts of civil society organizations and CONSEA, resistance on the part of some government elites and a lack of committed resources sapped the effectiveness of Brazil's food distribution program, ¹⁴⁴ allowing conditions of malnutrition and food insecurity to continue. In this way, Brazil's experience resembles the current situation in India, in that an active civil society may make little progress, due to the frustration of most reform efforts by an unsympathetic or apathetic government.

The situation in Brazil began to improve with the election of a new government in 2002. As opposed to India's approach to the right to food, based mainly on judicial action and public-interest litigation by NGOs, much of the leadership on *Fome zero* has come from the Brazilian political elite—namely President Lula da Silva, who even included the plan in his inaugural address. ¹⁴⁵ In fact, the Brazilian judiciary has been conspicuously absent from the fight against hunger, ¹⁴⁶ despite the fact that the right to food is referenced in Brazil's Constitution. ¹⁴⁷ This helps to illustrate how effective action by the executive and the legislature can be, irrespective of the court opinions so often relied upon to expand human rights. What is more,

^{142.} See Anthony Hall, From Fome Zero to Bolsa Família: Social Policies and Poverty Alleviation Under Lula, 38 J. Latin Am. Stud. 689, 692-93 (2006) (noting marked expansion of social spending in Brazil, beginning during the Cardoso Administration).

^{143.} *Id*.

^{144.} Special Rapporteur on the Right to Food, Addendum to Rep. on the Right to Food: Mission to Brazil, in Accordance with the Comm'n on Human Rights Res. 2000/10, at 2, ECOSOC, Comm'n on Human Rights, U.N. Doc. E/CN.4/2003/54/Add.1 (Jan. 3, 2003) (by Jean Ziegler).

^{145.} FAO, Lessons Learned, supra note 138, iv.

^{146.} FAO, *Right to Food Case Study, supra* note 138, at 6. I emphasize, however, that this fact should *not* be taken to undermine the Court's necessary role in the expansion of human rights, as I will discuss in Part IV.

^{147.} See Constituição Federal [C.F.] [Constitution] art. 6 (Braz.) (noting that nutrition is a social right, "as set forth in this Constitution"). However, the right to nutrition was only added to the constitution in February 2010. *Id.*, Amendment No. 64 of 2010. Before this time, the right to food was still guaranteed to some extent, through a provision that granted workers "a national uniform wage" capable of meeting the needs of workers and their families, which expressly included food. *Id.* art. 7, cl. iv.

the election of President Lula was the result of significant support from Brazilian civil society organizations, which fell into line behind Lula's *Fome zero* initiative, a major plank of his campaign.¹⁴⁸

Fome zero was inspired in part by domestic political pressure from citizens and civil society, ¹⁴⁹ and in part by the efforts of the international community, most notably through the Millennium Development Goals. ¹⁵⁰ As conceived by the Lula Administration, Fome zero offers a complex approach to food security issues, involving several ministries in the federal government as well as regional and local government officials. ¹⁵¹ Civil society groups are also afforded a substantial degree of participation in decision-making through CONSEA, which was reestablished by a 2006 law. ¹⁵² Both civil society organizations and government agencies at all levels are involved in the monitoring of Fome zero, ¹⁵³ leading to more effective implementation of the program. ¹⁵⁴ The experience of Brazil implies that the active participation of civil society in the deci-

^{148.} FAO, Right to Food Case Study, supra note 138, at 19-20.

^{149.} See id. at 7 (noting that the right to food remained a critical issue for civil society organizations, leading to its return to the political forefront during the 2002 election campaign); see also FAO, Lessons Learned, supra note 138, at 16 ("Citizens mobilized in a way that the country had never before witnessed and demanded to participate in changing public policies [with respect to pervasive hunger].").

^{150.} Hall, supra note 142, at 689-90.

^{151.} Brazil Report, supra note 45, ¶ 328.

^{152.} Special Rapporteur on the Right to Food, Addendum to Rep. on the Mission to Brazil, G.A. Human Rights Council, ¶ 14, U.N. Doc. A/HRC/13/33/Add.6 (Feb. 19, 2009) (by Olivier de Schutter) [hereinafter Special Rapporteur, Brazil Addendum].

^{153.} ECOSOC, Comm. on Econ., Soc. and Cultural Rights, Implementation of the International Covenant on Economic, Social and Cultural Rights: Consideration of Reports Submitted by States Parties in Accordance with Article 16 of the International Covenant on Economic, Social, and Cultural Rights - Replies by the Government of Brazil to the List of Issues (E/C.12/BRA/Q/2) to be Taken up in Consideration of the Second Periodic Report of Brazil, ¶ 231, U.N. Doc. E/C.12/BRA/Q/2/Add.1 (Mar. 16, 2009).

^{154.} Cf. Special Rapporteur, Brazil Addendum, supra note 152, ¶ 14 ("The participatory nature of these programmes, particularly shown through the work of CONSEA, are remarkable, and the success of Brazil in combating hunger and malnutrition, particularly child malnutrition, bears witness to the contribution that such participatory strategies can make to fulfilling such an objective.").

sion-making process is a critical feature to such programs;¹⁵⁵ indeed, civil society actors may provide the level of pressure necessary to keep political leaders focused on the solution.¹⁵⁶

It goes without saying that civil society is also a crucial element in the election of such progressive leaders in the first place.¹⁵⁷ This is so because of civil society's inherent ability to organize public campaigns and help elect politicians. Indeed, beyond pressing for change from the outside, civil society organizations may well serve as incubators for progressive political candidates on the national level. With its robust democratic institutions, including an extremely active civil society,158 it would not be exceedingly difficult for India to replicate this aspect of Brazil's success. 159 All that remains is to focus the NGO community on the issue of climate change and food security to an extent sufficient to sway the decisions of the political branches of government. As discussed above in Part II.B, the right to food is a unique vehicle for civil society groups to present climate change to policymakers and the general public in terms that are easily intelligible and likely to evoke a recognizable response on the part of voters. In turn, this response will help to foster and sustain the change in national priorities that is required in order to combat climate change.

^{155.} See id.

^{156.} Cf. Elisabeth Jay Friedman & Kathryn Hochstetler, Assessing the Third Transition in Latin American Democratization: Representational Regimes and Civil Society in Argentina and Brazil, 35 Comp. Pol. 21, 28 (2002) (describing how NGOs helped to shape the 1988 Brazilian Constitution); Patnaik & Reddy, Tool for Action, supra note 125, at 42 (calling for increased "organized public pressure" from civil society groups to help enforce the Indian Supreme Court's orders).

^{157.} Cf. FAO, Right to Food Case Study, supra note 138, at 7 (as discussed supra note 148 and accompanying text).

^{158.} During the fortieth session of the Committee on Economic, Social, and Cultural Rights, for example, eighteen groups issued shadow reports to India's state report on the ICESCR. No other states saw as many shadow reports. *See* Committee on Economic, Social and Cultural Rights – 40th Session, "Information from Other Sources" Column, Office of the United Nations High Commissioner for Human Rights, http://www2.ohchr.org/english/bodies/cescr/cescrs40.htm (last visited Oct. 13, 2010).

^{159.} But see Susanne Hoeber Rudolph, Civil Society and the Realm of Freedom, 35 Econ. & Pol. Wkly. 1762, 1764-65 (2000) ("The practice of democracy [in India] . . . may have disruptive effects on social capital.").

Before I am accused of giving too favorable a gloss to Brazil's efforts, I must stress that food insecurity remains a substantial problem, and is far from being resolved. 160 The point is not to identify which country has moved closest to fully realizing the right to food, but rather to discern which approach, political or judicial, has been most effective at surmounting the massive practical barriers presented by such comprehensive social programs. I submit here that, by focusing on the problem of food insecurity through the political branches of government, Brazil has been able to act more efficiently and with greater resolve, avoiding the traditional lag between sweeping judicial rulings and implementation by the state. Civil society has also served a critical role, urging the government along and augmenting its initiatives. 161 Indeed, it is difficult to conceive how Brazil's success, such that it is, could have been achieved without both government commitment on the issues and the active participation of the polity through civil society. Were the former lacking, implementation would be daunting to the point of impossibility; without the latter, it is conceivable that the government would not feel sufficiently pressured to make the necessary reforms a priority. Thus, Brazil is not just a model for how other similarly situated countries may realize the right to food, 162 but also for the achievement of complex socio-political reforms in general.

IV. PUTTING THE RIGHT TO FOOD INTO PRACTICE AS A POLITICAL WEAPON AGAINST CLIMATE CHANGE.

As mentioned in the introduction, there are three different levels on which interested parties can use the right-to-food argument as a lever to affect the policies of target states. These include domestic political action by civil society organizations and ordinary citizens; transnational diplomacy and other forms of inter-state political pressure; and a range of ac-

^{160.} See Special Rapporteur, Brazil Addendum, supra note 152, ¶ 6 (noting food insecurity in 37.5 percent of Brazilian households on average, with much higher rates among indigenous communities and other especially vulnerable groups).

^{161.} Cf. Brian Wampler & Leonardo Avritzer, Participatory Publics: Civil Society and New Institutions in Democratic Brazil, 36 Comp. Pol. 291, 291 (2004) ("Political activity within civil society has led to significant political and social change in municipal government in Brazil. . ..").

^{162.} See generally FAO, Lessons Learned, supra note 138.

tions by international organizations, including political pressure through U.N. bodies like the Committee on Economic, Social and Cultural Rights, and the inclusion of environmental language as part of grants and other assistance from international financial institutions like the International Monetary Fund.

A. International Litigation

Before reviewing these options, it is prudent to quickly note that litigation at the international level has been purposefully left off the list above. Any number of difficulties would essentially preclude taking an environmental right-to-food case to the International Court of Justice, the most likely forum for such a dispute. First, unless a state has consented to compulsory ICI jurisdiction, it is highly unlikely that such a claim could even be made at this level. Even if the complaining state were to employ an extremely creative legal strategy to get into court, as Part II describes, there are questions of correlation between discrete harms and state actions that are essentially irresolvable for doctrinal reasons. There is simply not enough evidence available to establish the proximate cause that is typically necessary to hold actors accountable in court. 163 What is more, we cannot be interested in ex post remuneration—the harms to be prevented are too great to be remedied after the fact.

Yet the standard for an injunction at the ICJ is just as high when viewed from the perspective of the right to food and the environment: preliminary injunctions are "only justified if there is urgency in the sense that action prejudicial to the rights of either parties is likely to be taken" before a final judgment is entered. ¹⁶⁴ Just as for damages, the admittedly vague nature of international greenhouse gas emissions would probably make it prohibitively difficult to pass this high bar. For these reasons, I now leave behind discussion of ICJ litigation and move on to more practical means of giving effect to the connection between the environment and the right to food.

^{163.} Cf. OHCHR Report, supra note 2, \P 70 ("[I]t is often impossible to establish the extent to which a concrete climate change-related event with implications for human rights is attributable to global warming.").

^{164.} Passage through the Great Belt (Fin. v. Den.), Order, 1991 I.C.J. 12, ¶ 23 (July 29).

B. Domestic-Level Implementation

Domestic politics are chaotic and sometimes unpredictable, especially in the developing world. Yet, as I argue above, the political approach to the right to food and the environment may be one of the most effective weapons available to activists and the public at large. This is so because it is the most direct means of establishing the substantial levels of commitment required from the legislative and executive branches of government for the implementation of the proactive climate change measures called for in this Note and demanded by the right to food.

To mobilize the public support necessary to effect change, the political activism approach requires a strong, influential, and independent domestic civil society. ¹⁶⁵ In India, the Right to Food campaign, though perhaps misdirected at the courts instead of politicians, demonstrates the capacity of that country's civil society organizations to unite around a common issue. ¹⁶⁶ Brazil offers an even more positive example, proving the extent of the effect activists may have on the government's policies—up to and including advancing members of their own ranks as candidates for national office. ¹⁶⁷ While, as noted above, judicial action alone may be an ineffective weapon against climate change, a combination of litiga-

^{165.} A dominant political majority that is unlikely to lose votes for a more proactive stance on climate change might also be successful in taking on environmental obligations stemming from the right to food. However, I do not discuss this option simply because a powerful pro-conservation majority does not appear to exist in any of the world's major greenhouse gas-emitting countries.

^{166.} Another indication of the Indian public's ability to pressure the government is developing currently, following the lenient sentences of several individuals convicted of criminal negligence in the December 1984 Union Carbide tragedy in Bhopal. See, e.g., Smita Gupta, Bhopal: Congress Says it's for Government, Not Party, to Explain, The Hindu (June 12, 2010), http://www.thehindu.com/2010/06/12/stories/2010061256910100.htm (discussing the Congress party's defensive response to civil society pressure concerning Bhopal); Elected Political Class Let Down Bhopal Victims: Chidambaram, NDTV (Aug. 12, 2010), http://www.ndtv.com/article/india/elected-political-class-let-down-bhopal-victims-chidambaram-43973 (citing a statement by the Indian Home Minister that the response of elected officials regarding victims of the Bhopal disaster has been "most unsatisfactory," and that the government would provide them free medical care).

^{167.} See supra note 148 and accompanying text.

tion and direct political pressure may be sufficient to change the tide of government policy, leading to more proactive measures on climate change. Even if judicial action is ultimately unsuccessful, the publicity from the case could in itself become a useful political tool, provided it is spun correctly.

Political campaigns have two discreet targets: the voting public and politicians. For the public at large, the central message of these campaigns must be that, by continuing to contribute to climate change, the national government is directly and irrefutably endangering the ability of its own citizens to feed themselves. Voters must therefore demand that measures be swiftly taken by the government to reduce the state's contribution to climate change and to pressure other governments to do the same. Linking the effects of global warming to food security, activists may be able to overcome one of the perennial issues surrounding climate change—namely that its immediate and most discussed effects are alone too remote to trigger the public's survival instinct.¹⁶⁸ Of course, such images may only trigger denial or other avoidance behavior, meaning that activists must tailor their approach carefully to avoid overwhelming audiences. 169 Above all, activists must stress that through concerted action society can still avert or mitigate the greatest threats posed by climate change.

The exact methods of activism targeted at the broader public may vary widely, including such aspects as media blitzes, direct mailings, lobbying, public demonstrations, educational activities, and, most importantly, get-out-the-vote drives during election years. The methods adopted by these campaigns must, of course, be tailored to the political environment in each individual country—there is no single blueprint for action—but the core of the message will likely remain the same across most contexts.

The message that must be addressed to political leaders differs from the campaigns designed for public consumption. It must appeal to politicians' self-interest through the voters,

^{168.} See Margot O'Neill, The Psychology of Climate Change, ABCNEWS (Nov. 6, 2009), http://blogs.abc.net.au/events/2009/11/the-psychology-of-climate-change.html (noting statements of neurologists that the climate change threat was too remote to trigger a fight-or-flight response).

^{169.} See Shome & Marx, supra note 27, at 20-23 (discussing the overuse of emotional appeals to lay audiences).

and to the governmental interests of national security, international politics, and legal obligations. It is in the context of state-focused activism that the legal connections between the right to food and environmental minimum standards can have the greatest effect, as such arguments are likely too technical for general consumption. Government-focused should stress that, should the state fail to act on climate change, its food security will be imperiled, meaning that it may become dependent on foreign aid to a degree unpalatable for most governments. The potential threat to the state's physical security stemming from violations of the right to food should also be stressed to policymakers—namely, that resource crunches within the state and outside its borders may lead to increasingly hostile relations, and perhaps even aggression, between neighboring states. Activists must also stress to politicians and other government actors that local action on climate change is not sufficient: the state must apply pressure to other governments through channels like the Council of Parties meetings on the Framework Convention on Climate Change, the United Nations, and even bilateral diplomacy, in order to ensure that reductions to greenhouse gas emissions are effective and lasting.

Additionally, state-focused campaigns should make sure to emphasize the legal ramifications of failing to act on climate change, both internally and through international diplomacy. Activists should thus incorporate any favorable decisions based on the right to food (or, indeed, other human rights approaches to climate change) in national courts, using the potential or actual noncompliance of the state as further support for political change. In this way, domestic litigation serves as part of a feedback mechanism, along with the political pressure generated by activists; domestic activism can and should make full use of favorable decisions or interpretations by international organizations, as well as of any diplomatic efforts put forth by national governments. Indeed, even in the absence of such decisions, interpretations, and diplomatic efforts, domestic activists may still employ legal reasoning akin to the conclusions in Part II regarding the necessity of a clean, stable environment for food security. The obligation on states to cooperate among one another to ensure human rights, as proposed

by John Knox in a recent essay, could also be included in state-focused activism. 170

The main benefit of domestic political activism is essentially that it circumvents the largest difficulties posed by litigation based on future violations of human rights like the right to food. 171 It achieves this, as described above, by passing over the critical need for the political branches of government to commit to implementing a judicial opinion, instead skipping directly to action by the executive and the legislature. There are, however, a number of problems with using domestic politics as a means to compel state action on climate change. First, of course, is that it requires a free and open, probably democratic, process that is responsive to the electorate. This rules out two of the top five greenhouse gas emitters, 172 although, as I argue below, China and Russia may still be vulnerable to transnational and international pressure.

More importantly, the political process is chaotic, with many competing goals and limited resources, meaning that it may be difficult to reach the desired result in time to prevent serious damage to the environment. This is especially true in societies that, like India,¹⁷³ are characterized by low levels of public awareness on the threat of climate change. Yet such objections are not substantive—rather they simply reinforce the need for immediate, carefully planned, and concerted action on the part of civil society groups to reach out to the public and the political leadership on the consequences of climate change for the right to food.

Another apparent problem striking closer to the heart of an approach based on domestic political action is the cold fact that, as opposed to judicial decisions, measures implemented by the political branches of government can be reversed as quickly as elections are lost. Yet research demonstrates that

^{170.} See generally Knox, supra note 84.

^{171.} See, e.g., OHCHR Report, supra note 2 and accompanying text.

^{172.} See Freedom in the World – China (2009), FREEDOM HOUSE, http://freedomhouse.org/inc/content/pubs/fiw/inc_country_detail.cfm?year=2009&country=7586&pf (last visited Sept. 7, 2010) (rating China as "not free"); Freedom in the World – Russia (2009), FREEDOM HOUSE, http://freedomhouse.org/inc/content/pubs/fiw/inc_country_detail.cfm?year=2009&country=7689&pf (last visited Sept. 7, 2010) (rating Russia as "not free").

^{173.} Anita Pugliese & Julie Ray, A Heated Debate: Global Attitudes Toward Climate Change, HARV. INT'L REV., Fall 2009, at 67.

democratic societies with a high level of civic activism and participation are far more likely than autocratic societies to respect the letter and spirit of international human rights norms.¹⁷⁴ The same should be true in cases like the one being discussed here, where human rights norms are expanded by treaty bodies and other actors. The presence of an active civil society may help prevent such backsliding, as will the general political outrage surrounding the loss of the entitlements created by initial state action on the environment.¹⁷⁵ Thus, though it may appear somewhat messy at times, domestic political action based on the right to food may turn out to be one of the most reliable weapons in the activist's arsenal.

Finally—and this is less a problem than a caution—untoward effects might stem from forcing the government to focus on environmental issues above all else. Restrictions on greenhouse gas emissions will impact the rate of economic development in states like China, India, and Brazil—indeed, this is the argument often employed by these and other states against such restrictions.¹⁷⁶ In reducing emissions, states may end up violating other economic and social rights, such as the right to work, or even the right to health care, by shutting down or throttling back inefficient sources of greenhouse gasses like factories and coal-fired power plants. The result would actually lower the overall standard of living within a state, doing as much violence to the Covenant as will be done if emissions go unchecked. It is indisputable that states must reduce their total greenhouse gas emissions or face dire consequences, but they must do so while balancing other important concerns.

^{174.} Eric Neumayer, *Do International Human Rights Treaties Improve Respect for Human Rights?*, 49 J. Conflict Resol. 925, 926 (2005) ("In the absence of democracy and a strong civil society, [human rights] treaty ratification has no effect and is possibly even associated with more human rights violations.").

^{175.} Cf. Thomas F. Burke, The Rights Revolution Continues: Why New Rights are Born (and Old Rights Rarely Die), 33 Conn. L. Rev. 1259 (2001) (arguing that turning away from political entitlements, once created, can be costly and politically difficult).

^{176.} See, e.g., Srikanta K. Panigrahi, Director, India Env't & Forests Planning Comm'n, Climate Change and Development in Indian Context, Paper delivered to the Eighth Session of the Conference of the Parties to the U.N. Framework Convention on Climate Change 1 (Oct. 31, 2002), available at http://unfccc.int/cop8/se/kiosk/cd4.pdf ("As a priority, Development certainly comes first.").

Thus, this note does not call for a "drop-everything" approach to the environment and the right to food—rather, a more nuanced and locally tailored approach is needed.¹⁷⁷

C. Transnational Action: Interstate Diplomacy

Domestic measures to reduce emissions can only go so far to fulfill the obligation to act on climate change. Diplomatic pressure represents the other half of the equation.¹⁷⁸ In many ways, diplomacy on the environment and the right to food will likely resemble the state-focused domestic activism discussed in the preceding section. The arguments will be very much the same as those employed by domestic civil society organizations, although, of course, the bargaining power between the parties will be more equal.

Successful diplomatic pressure will likely include elements like the potential for future violations to the right to food and other human rights within the target state. Decisions and recommendations by international organizations may become an important part of this strategy, as they will naturally give states more material to work with in pursuing consensus among the international community. Diplomats should also stress the international political ramifications of a state's failure to act on climate change and the impact of such an omission on that state's national security. Noncompliant states should be reminded of their legal and moral obligations, and could even be threatened with trade actions like boycotts, though, of course, such measures would have to be massaged to avoid liability under World Trade Organization law.

Of course, diplomacy has failed to yield sweeping change on environmental issues in the past—most notably at the COP 15 meeting in Copenhagen in December 2009, the final product of which failed to justify the hopes of most climate activ-

^{177.} The need for a nuanced approach raises another distinct advantage and disadvantage of domestic political activism: while local activism would allow far more flexibility on the part of governments to implement locally tailored plans of action, it might also lead to excessive delays and insufficient reductions. To counter these issues, civil society groups must maintain pressure on the political leadership.

^{178.} Diplomacy could also represent an expression of the duty to cooperate highlighted by Knox. *See supra* note 84 and accompanying text.

^{179.} See supra Part IV.B.

ists.¹⁸⁰ But even efforts that appear to fail initially may be salvaged, to a certain extent, by domestic activists or international organizations. In both cases diplomatic pressure may serve as evidence for international public opinion regarding climate change, which can in turn be used to increase the rhetorical effect of statements made by domestic and international actors alike. Diplomacy is only a part of a broader strategy, designed to ratchet up pressure on noncompliant states through as many means as possible.

D. Using International Institutions to Pressure States on Climate Change

Though not without their own faults, international institutions are uniquely positioned to serve both as additional fora for applying leverage to noncompliant states and, because of their increased visibility, as mechanisms to coordinate activism strategies across countries. Further, international institutions act as central repositories of critical information for civil society organizations and state actors alike, lowering the barriers to entry into the debate.¹⁸¹ All of these functions play an integral role in the multilateral, multi-front approach supported by this Note, as they both support the other pathways of action discussed above and serve as independent mechanisms through which states can be coerced into taking the necessary steps to prevent or mitigate climate change.

At this level, the importance of *which* human right is prioritized begins to diminish. Although the right to food certainly remains an effective vehicle for action on the international level, it loses some of the comparative advantage it enjoys on the domestic level, since there is less of a need to appeal directly to constituents. I nevertheless consider international institutions here because they would without doubt play an important role in any right to food-based campaign.

^{180.} See, e.g., Daniel Nielsen, *Plenary Session Marked by Resignation*, TheCop15Post (Dec. 17, 2009), http://cop15post.com/2009/12/17/news/plenary-session-marked-by-resignation/.

^{181.} An excellent example of such an information repository is the IPCC, which has published a wealth of climate change data online. *See generally* Intergovernmental Panel on Climate Change, http://www.ipcc.ch (last visited Oct. 14, 2010).

The United Nations and its sub-organs are probably the most obvious and most highly visible of the various international institutions contemplated in this Note. First and foremost with respect to the right to food are the Committee on Economic, Social and Cultural Rights and the Special Rapporteur for the Right to Food. As discussed in Part II, each of these institutions carries authority over the interpretation of the right to food as an international legal concept; as such, it is extremely important that both the Committee and the Special Rapporteur commit to an expanded reading of the right to food, including environmental minimum standards. Indeed, the Special Rapporteur has already done so, at least to a limited extent linking the two issues in his recent report on Brazil. 182 The Committee should follow the Special Rapporteur's lead by issuing a strongly worded statement concerning environmental impacts on the right to food as soon as possible. It must go beyond the broad phrasing of General Comment 12183 and explicitly underscore the fact that states' obligations under Article 11 cannot be fulfilled unless definite action is undertaken to combat climate change. Much of the normative work has already been done by the Office of the High Commissioner on Human Rights,¹⁸⁴ thereby easing the burden of the vanguard that might otherwise delay the Committee.

Other U.N. agencies like the FAO and the UNDP can act to reinforce such statements by the Committee and the Special Rapporteur by echoing the link between the right to food and minimum environmental standards in their own guidelines, reports and recommendations. They may, of course, also act independently, without waiting for a definite statement from the Committee, especially given the large amount of technical literature already available on the subject.¹⁸⁵

^{182.} See Special Rapporteur, Brazil Addendum, supra note 152, ¶ 22 (cautioning against hasty economic development projects, lest they prejudice the environment and the right to food); id. ¶¶ 29-30 (noting various ways environmental degradation impacts the right to food and recognizing Brazil's regulatory efforts to curtail violations of environmental law).

^{183.} See supra Part II.B.

^{184.} See OHCHR Report, supra note 2, at 8-15 (noting harms to specific human rights).

^{185.} See supra Part II.A.

Interpretive actions taken by U.N. agencies, and even by the Committee and the Special Rapporteur, are non-binding and have an uncertain effect on states, as Part III indicates. Yet they may still have a significant impact, especially in conjunction with domestic political campaigns and diplomatic action. The perception of wrongdoing by states that fail to reduce their greenhouse gas emissions or otherwise act to mitigate climate change may well exert sufficient normative force on national governments that they begin to comply, especially if attention is drawn by domestic civil society organizations to states' noncompliance with international norms. Indeed, even China, perennially recalcitrant when it comes to binding climate change initiatives, 186 has recognized that it is in its own interest to slow the growth of its greenhouse gas emissions, albeit for economic and security reasons rather than environmental ones. 187 An interpretive decision from one or more of the U.N. agencies mentioned above, when coupled with additional diplomatic pressure, could help realign the priorities of China or other holdouts to the extent that they would be willing to submit to some form of binding emissions reductions. China's argument against binding greenhouse gas reductions is partially based on historic fairness: developing states should not be made to reduce emissions because this would constrain their growth and advantage states that have already developed enough to afford the cost of such reductions. 188 If, however, China's closest rivals prove willing to submit to binding reductions, this argument begins to lose legitimacy, and China may begin to bow to pressure from interstate diplomacy and inter-

^{186.} See, e.g., Mark Lynas, How Do I Know China Wrecked the Copenhagen Deal? I Was in the Room, TheGuardian.Co.UK (Dec. 22, 2009), http://www.guardian.co.uk/environment/2009/dec/22/copenhagen-climate-change-mark-lynas.

^{187.} See Keith Bradsher, Security Tops the Environment in China's Energy Plan, N.Y. Times, June 18, 2010, at B1, available at http://www.nytimes.com/2010/06/18/business/global/18yuan.html; Pew Center on Global Climate Change, Int'l Brief 1, Climate Change Mitigation Measures in the People's Republic of China (Apr. 2007), at 2, available at http://www.pewclimate.org/docUploads/International%20Brief%20-%20China.pdf (explaining that China's energy consumption targets are part of a broader plan to quadruple economic growth while only doubling energy consumption).

^{188.} See Tobias Rapp et al., The Copenhagen Protocol: How China and India Sabotaged the U.N. Climate Summit, Spiegel Online (May 5, 2010), http://www.spiegel.de/international/world/0,1518,692861,00.html.

national organizations alike. This is a longshot, to be sure, but it is possible.

Beyond the boundaries of the United Nations, international financial institutions ("IFIs") like the World Bank Group and the International Monetary Fund could play a significant role in enforcing environmental obligations based on the right to food. Ideally, interpretive decisions by U.N. bodies like the Committee would become the framework for action by the IFIs, who could include mandatory language on environmental minimum standards in the loans and other financial assistance they provide. The World Bank already considers the environmental impacts of its projects by undertaking impact assessments. 189 While IFIs currently do not make loans contingent on human rights conditions as a general matter, right-to-food and climate change criteria fit well within the preexisting framework of the environmental assessment process. As with the other agencies mentioned above, however, there is no reason other than operational consistency that should prevent the IFIs from acting ahead of the Committee and making their own decisions as to what actions are necessary based on the right to food.

It must be said that there are substantial obstacles for the Committee and other international institutions in performing what is, in all honesty, a major expansion of the scope of the ICESCR. The potential conflicts between the environmental obligations foreseen in this Note and other important human rights like the right to work, right to health, and right to development, have already been mentioned in the context of domestic politics. They are even more important for international organizations to consider, as the actions of such organizations affect a far greater number of people spread over a much larger area. On an institutional level, there is also the fear that by expanding instruments like the ICESCR further than they were originally intended to reach, the Committee and the Special Rapporteur may lose legitimacy among large

^{189.} See Envy'll. & Soc. Dev. Unit, World Bank, Safeguard Dissemination Note No. 2, Environmental Impact Assessment Regulations and Strategic Environmental Assessment Requirements: Practices and Lessons Learned in East and Southeast Asia ix (Apr. 2006), available at http://vle.worldbank.org/bnpp/files/TF055249EnvironmentalImpact.pdf (offering "a baseline study from which further analytical and advisory work will follow").

numbers of states parties, leading to the potential collapse of the treaty regime.¹⁹⁰ This is, of course, not meant to argue against using the United Nations and its various agencies to combat climate change via the right to food; rather, it is yet another word of caution against overzealous action.

V. Conclusion

The connection between the right to food and climate change is evident. Therefore, states attempting to fulfill their obligations under the right to food must strive to guarantee certain minimum standards of environmental quality. Yet because the ability to enforce such connections through adjudication is, at best, uncertain, I argue that the most effective tool to convince states of the necessity of reversing or mitigating climate change is a multi-layer strategy based around domestic advocacy and activism, transnational diplomacy, and interpretive and regulatory actions carried out by international organizations like the United Nations.

The right to food is more useful than other human rights as a political weapon because food security is a far more concrete, less conceptual issue for many people than is, for example the right to life. Food is intimately connected with our daily routines, and will thus provoke a more visceral response than the vague possibility that someone, somewhere, may be killed by processes related to global warming. By combining highly visible political activism with multilateral diplomacy and additional pressure from international organizations, activists may have an impact on state policy with respect to climate change.

It is, of course, quite easy to sit down and plot out the strategy envisioned in this Note. I fully recognize the operational complexities that may hamper or even stop cold a rights-based approach to climate change. Indeed, it is in view

^{190.} There exists here a certain paradox, the investigation of which is sadly beyond the scope of this Note. Confronted with unforeseen problems that directly affect human rights, it becomes apparent that broad instruments like the Covenant are no longer sufficient to deal with such issues. Yet the conclusion of new international instruments of similar caliber and inclusiveness may be exceedingly difficult, leaving us with the uncomfortable choice of doing nothing or attempting to shoehorn new obligations into old law.

of the potential pitfalls that I argue activists and other interested parties must not place all their proverbial eggs in one basket. Though a discussion of other approaches to climate change, rights-based and otherwise, is far beyond the scope of this Note, it is highly probable that they will play a substantial role in reaching this all-important goal, as the right to food simply cannot support so great a burden on its own. This approach is highly flexible, adaptable to local conditions, and imprecise—in this case a beneficial quality, as it means that the failure or underperformance of one strand will not necessarily prove fatal for the whole. Further, working in concert with other rights-based approaches will help to minimize any potential conflict between environmental conservation on one hand and a variety of human rights on the other.

The bottom line is that the threat posed to humanity by climate change is on a scale that defies comprehension. In order to combat global warming in any meaningful way, we must approach the problem from all sides with all available means in the simple hope that something will have a positive effect on the situation. The Green Revolution of the 1950s and 1960s spurred global food production with new developments in technology, and offered the first real hope of attaining full implementation of the right to food; we now need a second wave of social change through human rights, a Greener Revolution that will allow us to address together the most pressing issue we have ever faced.