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Advocacy Strategies for Promoting Greater Consideration of Climate Change and Human Rights in Development Activities: The Case of the West Seti Hydroelectric Project in Nepal

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ARTICLE

Advocacy Strategies for Promoting Greater Consideration of Climate Change and Human Rights in Development Activities: The Case of the West Seti Hydroelectric Project in Nepal

LISE JOHNSON*

I. INTRODUCTION

Construction may soon begin on the West Seti Hydroelectric Project (WSHP) in the western region of Nepal. The 750-megawatt facility, which will produce power primarily for export to India, involves construction of a 195-meter high dam on the Seti River that will inundate over 2000 hectares of land.¹ The resulting reservoir, developments downstream of the dam, and transmission lines running from the WSHP are predicted to affect 18,269 people in 2,421 households,² requiring an estimated 1,393 of those households to be resettled.³

* LL.M., Columbia Law School, 2009; J.D., University of Arizona Rogers College of Law, 2004. Great thanks are due to Rabin Subedi for his information and insight on hydropower development in Nepal. Thanks are also due to the editors of the Pace Environmental Law Review for their thoughtful critiques. Any errors remain those of the author alone.

1. SMEC West Seti Hydroelectric Corp. Ltd. (SMEC-WSHL), *Project Details*, <http://www.wsh.com.np/project-details/> (last visited Apr. 21, 2009). For the purposes of this article, the SMEC West Seti Hydroelectric Corp. Ltd. will be referred to as SMEC-WSHL.

2. SMEC-WSHL, WEST SETI HYDROELECTRIC PROJECT ENVIRONMENTAL IMPACT ASSESSMENT (VOLUME 3), RESETTLEMENT PLAN: RESERVOIR AREA AND DOWNSTREAM PROJECT COMPONENTS xi (2008), *available at* http://www.adb.org/Documents/Resettlement_Plans/NEP/40919/40919-NEP-RP.pdf.

3. *Id.*

The private and public entities promoting and financing the project (at an expected cost of \$1.6 billion)⁴—namely, SMEC-WSHL, the government of Nepal (GoN), and the Asian Development Bank (ADB)—argue that the WSHP is a way of enabling Nepal to generate much-needed revenue from use of its rich water resources, and a means of enabling India to meet its energy needs in an allegedly climate-friendly manner—two important goals. It is currently impossible, however, for the people of Nepal to determine what price is being paid in order to accomplish those aims. This is because the environmental impact assessment (EIA) prepared by SMEC-WSHL, and approved by both the ADB and the GoN as a prerequisite to their respective approvals of the WSHP, leaves certain major issues regarding the project's possible economic and environmental costs inexplicably unaddressed.⁵ Those major omissions in the EIA all relate to its failure to take climate change into account even though scientific projections indicate that the phenomenon will affect the long-term viability of the project, its economic returns for investors and Nepal, and its environmental and social consequences.⁶

In light of the severe and long-term consequences of unwise development of a major dam project such as the WSHP—a project which will irreversibly destroy ecosystems, permanently alter land and water use in the development region, necessitate relocation and resettlement of thousands of people, and require investment of vast sums of government and private funds—this paper addresses the significant omissions in the WSHP's EIA in an attempt to ensure that development of the project, if pursued, proceeds only with full disclosure of its possible costs and benefits. Only through such disclosure will development of the project be consistent with the human rights of the Nepali people. In Part II, this paper highlights the key climate change-related omissions from the EIA that render its portrayal of the project misleading.⁷ Then, in Part III, it discusses how the inadequate

4. INT'L RIVERS, MOUNTAINS OF CONCRETE: DAM BUILDING IN THE HIMALAYAS 11 (2008), available at http://internationalrivers.org/files/IR_Himalayas_rev.pdf.

5. See *infra* Part II.

6. *Id.*

7. This paper focuses specifically on climate change-related omissions from the EIA. It does not aim to catalogue the myriad other environmental and human rights issues arising out of development of the WSHP. For a discussion of some of those issues, see, e.g., INT'L RIVERS, *supra* note 4 (discussing issues

EIA violates the human rights of Nepalese people as guaranteed under both domestic Nepalese and international law. In Part IV, the paper suggests some promising options that advocates can use to remedy those violations. Finally, in Part V, this paper broadens the discussion beyond the West Seti; and illustrates how climate change-related considerations may affect other major development projects' environmental and economic costs and benefits, and therefore should increasingly be taken into account during project selection and design. It then identifies how, if such considerations are not adequately addressed, advocates can seek to remedy those failings by employing the same or analogous strategies suggested for use in the case of the WSHP.

II. WSHP DETAILS

In 1994, the GoN negotiated a memorandum of understanding with the Snowy Mountains Engineering Company (SMEC), an Australian corporation, to explore and begin pursuing development of the WSHP.⁸ Among its provisions, the 1994 agreement provided that SMEC, through a subsidiary company it established under the laws of Nepal, the West Seti Hydroelectric Corporation Limited (SMEC-WSHL), would initiate work to prepare a Detailed Engineering Report (DER) on the project.⁹ In 1997, SMEC-WSHL and the GoN entered into additional agreements to further the development of the WSHP:

with the WSHP and other planned developments in the Himalayas); Ananta Raj Luitel, *West Seti Verdict a Watershed—“Decision Not in National Interest”*, HIMALAYAN TIMES, Sept. 8, 2008; YUKI TANABE, JAPAN CTR. FOR A SUSTAINABLE ENV'T & SOC'Y, REPORT ON THE WEST SETI HYDROELECTRIC PROJECT AND ADB POLICY VIOLATIONS (2007), available at http://www.internationalrivers.org/files/JACSES_Report_on_West_Seti.pdf. Also, for a discussion of issues arising out of construction of large dams generally, see, e.g., INTERAMERICAN ASSOCIATION FOR ENVIRONMENTAL DEFENSE, LARGE DAMS IN THE AMERICAS: IS THE CURE WORSE THAN THE DISEASE (2009), available at <http://www.aida-americas.org/aida.php?page=203&lang=en>; THAYER SCUDDER, THE FUTURE OF LARGE DAMS: DEALING WITH SOCIAL, ENVIRONMENTAL, INSTITUTIONAL AND POLITICAL COSTS (2005); JACQUES LESLIE, DEEP WATER: THE EPIC STRUGGLE OVER DAMS, DISPLACED PEOPLE, AND THE ENVIRONMENT (2005); PATRICK MCCULLY, SILENCED RIVERS: THE ECOLOGY AND POLITICS OF LARGE DAMS (2001); WORLD COMM'N ON DAMS, DAMS AND DEVELOPMENT: A NEW FRAMEWORK FOR DECISION-MAKING (2000).

8. West Seti Hydroelectric Project Agreement (1994) (on file with the author).

9. *Id.*

the first agreement, reached in May, related to the export of electricity from the proposed WSHP,¹⁰ and the second, reached in June, was a “Project Agreement” setting forth the terms and conditions for “proceed[ing] with the objective of implementing the [750 MW WSHP].”¹¹

The Project Agreement stated that SMEC–WSHL would prepare an Environmental Impact Assessment (EIA) of the WSHP “as part of the DER in accordance with the National Environmental Impact Assessment Guidelines, 2050, the Environment Protection Act, 2053 and any relevant rules and guidelines made thereunder.”¹² SMEC–WSHL submitted the DER to the government in December 1997, and received approval of that report in January 1999.¹³ Subsequently in August 1999, SMEC–WSHL submitted the EIA to the government.¹⁴ Nepal’s relevant agency, the Ministry of Population and Environment (now the Ministry of Environment, Science and Technology) approved the WSHP in 2000.¹⁵ In 2007, SMEC–WSHL prepared an updated EIA to assess project impacts on the transmission line connecting the power generated by the WSHP to the Indian electricity transmission grid, as well as to incorporate new information on increased costs and the project’s plan to resettle and relocate Nepali people affected by the project.¹⁶

As the EIA describes, the project involves construction of a 195 meter-high concrete-faced rock-fill dam, creating a 2,060-hectare reservoir area with a total storage capacity of 1,566 million cubic meters of water.¹⁷ The project will require the

10. *Id.*

11. *Id.* pmbl., para. D.

12. *Id.*

13. SMEC-WSHL, WEST SETI HYDROELECTRIC PROJECT ENVIRONMENTAL IMPACT ASSESSMENT (VOLUME 1), MAIN REPORT 6 (2000) [hereinafter 2000 EIA], available at http://www.wsh.com.np/wp-content/uploads/2008/09/eia_vol1_complete_document.pdf.

14. *Id.* at 30.

15. W. SETI HYDRO LTD. FOR THE ADB, SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT, NEPAL: WEST SETI HYDROELECTRIC PROJECT 1 (2007) [hereinafter 2007 EIA], available at <http://www.adb.org/documents/environment/nep/40919-nep-seia.pdf>.

16. *Id.* In the text, this paper uses the term “EIA” to refer to both the original EIA, and any subsequent additions to it, such as this 2007 EIA. If only one is referred to, the text or accompanying footnote will make that clear.

17. *Id.* at 2.

acquisition of 2,326 hectares of land, including 659 hectares of cultivated land, 806 hectares of forest, 246 hectares of grassland and 169 acres of shrub land.¹⁸ The entirety of the WSHP is located in the Far-Western Development Region of Nepal, one of the country's least developed and poorest areas, with a poverty rate of 41% that is well above the national average of 31%.¹⁹

The project is being constructed as a build-own-operate-transfer scheme, whereby SMEC-WSHL has a thirty-year generating license covering the WSHP's predicted 5.5-year construction phase, and the first 24.5 years of the project's commercial operation.²⁰ At the end of that time frame, the project will be transferred entirely to the GoN.²¹ Pursuant to a power purchase agreement between SMEC-WSHL and the Power Trading Company (India) Limited (PTC), once the WSHP begins commercial operation, for the following twenty-five years, PTC will purchase from SMEC-WSHL the power generated by the project.²² PTC, in turn, will sell that power to India.²³ In return for its hosting the project and submerging its land and resources, the GoN will receive royalties from the sale of power to PTC, and can also elect to either receive ten percent of the WSHP's output as free power, or ten percent of the revenue received from India's purchase of the electricity.²⁴

According to SMEC-WSHL's 2007 estimates, the GoN will receive \$991 million in revenue during the course of the 30-year generation license, with an average annual benefit of \$33 million.²⁵ After the thirty-year license expires, SMEC-WSHL projects that the GoN will receive \$170 million per year in revenue from electricity sales to India (assuming the prices in the power purchase agreement between SMEC-WSHL and PTC continue to apply).²⁶ That revenue stream, however, will only be temporary because the accumulation of sediment in the reservoir

18. *Id.* at 15.

19. *Id.* at 7-8.

20. *Id.* at 2.

21. 2007 EIA, *supra* note 15, at 2.

22. *Id.*

23. *Id.*

24. *Id.*

25. *Id.* at 29.

26. *Id.*

will eventually prevent the WSHP from being able to generate power.²⁷ According to the EIA, sedimentation in the reservoir may terminate the hydropower project's useful life within twenty-five years after the project is transferred to the GoN.²⁸ At that time, the government will have to decommission the dam, a process which will require the government to perform a host of significant tasks including: assessing the safety of the dam; removing selected facilities and maintaining others; recycling and disposing of materials and wastes, including hazardous wastes; evaluating the effect of decommissioning on aquatic ecosystems and uses of the river water; identifying ways to mitigate negative effects of decommissioning; conducting ongoing maintenance, surveillance, and security of retained facilities; and budgeting for and financing these and other necessary activities.²⁹

III. THE EIA, ITS SIGNIFICANT OMISSIONS & THEIR IMPLICATIONS

As noted above, SMEC-WSHL submitted its EIA for the project to the Nepalese government in August 1999, and received approval of the document the following year.³⁰ In 2007, SMEC-WSHL prepared an updated EIA to assess impacts of the transmission line connecting the power to the Indian electricity transmission grid, as well as to incorporate new information on increased costs and the project's plan to resettle and relocate Nepali people affected by the project.³¹ As required under Nepali law,³² these EIAs (collectively referred to hereafter as the EIA),

27. 2000 EIA, *supra* note 13, at 241; W. SETI HYDRO LTD., WEST SETI HYDROELECTRIC PROJECT PRELIMINARY DECOMMISSIONING PLAN 2-3 (2007) [hereinafter PRELIMINARY DECOMMISSIONING PLAN].

28. 2000 EIA, *supra* note 13, at 241; PRELIMINARY DECOMMISSIONING PLAN, *supra* note 27, at 2-3.

29. PRELIMINARY DECOMMISSIONING PLAN, *supra* note 27, at 8.

30. 2000 EIA, *supra* note 13, at 30.

31. 2007 EIA, *supra* note 15.

32. Environment Protection Rules (Nepal), Schedule 2(e) (1997) (requiring an EIA for projects involving the "[o]peration of electricity generation projects with a capacity of more than 5 mw," "[c]onstruction of multipurpose reservoirs," and "[a]ny water resources development activity which displaces more than 100 people with permanent residence"), Schedule 2(j) (requiring an EIA for proposals to be implemented in "[s]emi-arid, mountainous and Himalayan regions"), Schedule 2(k) (requiring an EIA for "[o]peration of any planning, project or programme relating to any developmental work, physical activities or change in

were to detail the “technical, geographical, environmental, economic, social, cultural and physical aspects of the proposal,” and its alternatives’ “[s]hort, medium, and long-term adverse impact[s].”³³ Review and approval of the EIA by the GoN is a prerequisite to development of the WSHP.³⁴

The EIA, however, omits crucial environmental and economic information, and consequently fails to provide either an accurate picture of the WSHP’s impacts, or an adequate assessment of the project’s alternatives. More particularly, the EIA fails to address three critical issues: (1) the effects of climate change on the WSHP and the extent to which climate change alters the projected impacts of the project, (2) the implications of the WSHP for greenhouse gas (GHG) sinks and emissions in Nepal, and (3) the myriad economic and environmental issues associated with dam decommissioning once the project is transferred to the GoN.³⁵

land use . . . with a cost of more than 100 millions” [sic], *available at* <http://www.lawcommission.gov.np/index.php/ne/--/doc/491/raw>.

33. *Id.* sched. 6, paras. 4, 7.

34. Environment Protection Act (Nepal), 2053, §§ 3-4 (1997), *available at* <http://www.elaw.org/node/1937>.

35. While the laws and regulations governing preparation of EIAs do not specifically require assessment of projects’ impacts on climate change, or assessment of the projects as impacted by a changing climate, the broad requirement that EIAs describe the “technical, geographical, environmental, economic, social, cultural and physical aspects of the proposal,” and its and its alternatives’ “[s]hort, medium, and long-term adverse impact[s],” would presumably include impacts on and by climate change if such impacts were reasonably significant and relevant to the project. *Id.* As the discussion in this Part II aims to illustrate, the potential climate change-related impacts on and by the WSHP are significant and merit attention. Case law in the United States regarding analysis of environmental impacts under the National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. §§ 4321-47 (2006), and its state law analogues similarly supports the argument that if they are relevant to a project’s environmental impacts, climate change-related considerations should be taken into account in analyzing and selecting projects and policies. *See, e.g.,* Ctr. for Bio. Diversity v. Nat’l Highway Traffic Safety Admin., 508 F.3d 508 (9th Cir. 2007) (holding that the federal agency’s Environmental Assessment under NEPA was inadequate due to its failure to adequately address the impacts its proposed rule and available alternatives would have on greenhouse gas emissions); NRDC v. South Coast Air Quality Mgmt. Dist., No. BS 110792 (L.A. Co. Super. Ct. July 28, 2008) (holding that the state entity’s failure to discuss the impacts its rule would have on greenhouse gas emissions and climate change violated California’s Environmental Quality Act).

A. Effects of Climate Change on the WSHP

Evidence of the effects of climate change on Nepal's diverse climate, which ranges from tropical in the country's low elevations to arctic in the Himalayas,³⁶ is already apparent. Data on temperatures in Nepal from 1977-1994 reveal a general warming trend, with temperature changes being most pronounced during the country's dry winters and in its higher elevations.³⁷ "Significant glacier retreat as well as significant areal expansion of several glacial lakes have also been documented in recent decades, with an extremely high likelihood that such impacts are linked to rising temperatures" caused by anthropogenic emission of GHGs.³⁸ Climate change is also thought to have produced more intense precipitation events in the country, and to have resulted in decreased river flows in the dry season.³⁹

These trends of rising temperatures, retreating glaciers, and more intense monsoon seasons are projected to continue. Based on the IPCC's "B2" scenario, which uses moderate assumptions to predict future impacts of climate change,⁴⁰ a 2003 study using

36. AHARDUL AGRAWALA ET AL., ORG. FOR ECON. CO-OPERATION & DEV., DEVELOPMENT AND CLIMATE CHANGE IN NEPAL: FOCUS ON WATER RESOURCES AND HYDROPOWER 12 (2003), available at <http://www.oecd.org/dataoecd/6/51/19742202.pdf>.

37. *Id.*

38. *Id.* at 13; see also INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC), WORKING GROUP II, CLIMATE CHANGE IMPACTS, ADAPTATION, AND VULNERABILITY 493 (2007), available at <http://www.ipcc.ch/ipccreports/ar4-wg2.htm>. See also GOV'T OF NEPAL & U.N. DEV. PROGRAMME, PROJECT DOCUMENT—NEPAL: NATIONAL ADAPTATION PROGRAMME OF ACTION TO CLIMATE CHANGE 1 (2008).

[A] range of recent scientific studies show that Nepal is highly vulnerable to the potential negative impacts of climate change. Consistent rises in annual mean temperature, less frequent but more intensive rainfall events, increasing frequency and intensity of floods, changes in monsoon on- and offset, growing threat from Glacial Lake Outburst Floods (GLOF), longer dry spells and drought events, and increasingly stronger storms have already been experienced in Nepal in the past decade.

Id.

39. AGRAWALA ET AL., *supra* note 36, at 14; see also IPCC, WORKING GROUP II, *supra* note 38, at 476 (noting the observed occurrence of "[s]erious and recurrent floods in . . . Nepal").

40. The B2 scenario is one of a family of the IPCC's Special Report on Emissions Scenarios (SRES). The SRES scenarios "explore alternative

various climate models predicted a “significant and consistent increase in temperatures . . . for Nepal for the years 2030, 2050, and 2100.”⁴¹ Scientists project such trends will trigger accelerated “widespread mass loss from glaciers;”⁴² and that they might also be accompanied by more intense summer monsoons, which will, in turn, increase the risk of flooding and landslides.⁴³

development pathways, covering a wide range of demographic, economic and technological driving forces and resulting GHG emissions . . . B2 describes a world with intermediate population and economic growth, emphasizing local solutions to economic, social, and environmental sustainability.” IPCC, FOURTH ASSESSMENT REPORT, SUMMARY FOR POLICYMAKERS 44 (R.K. Pachauri & A. Reisinger eds., 2007), *available at* http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf; *see also* IPCC, SPECIAL REPORT ON EMISSIONS SCENARIOS, CHAPTER 4: AN OVERVIEW OF SCENARIOS (2000), *available at* <http://www.ipcc.ch/ipccreports/sres/emission/091.htm>.

41. AGRAWALA ET AL., *supra* note 36, at 15.

42. The IPCC’s Working Group II reported these findings in its SUMMARY FOR POLICYMAKERS. See SUMMARY FOR POLICYMAKERS, *supra* note 40, at 49. In its more detailed, 938-page report, the Working Group II included a specific projection about the rate and extent of glacial loss, stating the following:

Glaciers in the Himalayas are receding faster than in any other part of the world . . . and, if the present rate of [Himalayan glacial loss] . . . continues, the likelihood of them disappearing by the year 2035 and perhaps sooner is very high if the Earth keeps warming at the current rate. Its total area will likely shrink from the present 500,000 to 100,000 km² by the year 2035.

GROUP II, CLIMATE CHANGE IMPACTS, ADAPTATION, AND VULNERABILITY 493 (2007). In January 2010, the Chair and Vice-Chairs of the IPCC and the Co-Chairs of the IPCC Working Groups issued a statement criticizing that paragraph as including “poorly substantiated estimates of rate of recession and date for the disappearance of Himalayan glaciers.” IPCC, IPCC STATEMENT ON THE MELTING OF HIMALAYAN GLACIERS (2010), <http://www.ipcc.ch/pdf/presentations/himalaya-statement-20january2010.pdf>. The statement, however, also emphasized that the issues with that particular paragraph in the nearly thousand-page Working Group II report did not invalidate the report’s other findings and conclusions. The January 2010 statement affirmed that earlier projections regarding “[w]idespread mass losses from glaciers” remained “robust, appropriate, and entirely consistent with the underlying science and the broader IPCC assessment.” *Id.*

43. AGRAWALA ET AL., *supra* note 36, at 16. The models projected,

an overall increase in annual precipitation. However, given the high standard deviation [reflecting inconsistent results of various models used for the projections,] the results for annual precipitation should be interpreted with caution. Even more speculative is the slight increase in winter precipitation. The signal however is somewhat more pronounced for the increase in precipitation during the summer monsoon months (June, July, and August).

Such projections relating to climate change have extremely significant and pressing implications for hydropower development in Nepal and, more particularly, the WSHP.⁴⁴ Yet these implications—three of which are discussed below—were not addressed in the EIA.

i. Glacial Lake Outburst Floods

Glacial lakes are common at high altitudes of the Nepal Himalaya, forming and growing as glaciers melt and retreat.⁴⁵ The water in these lakes is generally held by moraine (glacial debris) or ice barriers.⁴⁶ When the amount of water in the glacial lakes increases, and/or the barriers of ice restraining the water melt and thus weaken, the risk increases that the barrier will no longer be able to restrain the impounded water, causing a glacial lake outburst flood (GLOF).⁴⁷ GLOFs can be extremely powerful, and at “their extreme . . . can release millions of cubic meters of water in a few hours.”⁴⁸ With the floodwater, GLOFs also can transport significant amounts of sediment and debris. GLOFs are thus a concern for hydropower development because the surges of water, sediment and debris can pose significant risks to project structures, and can fill reservoirs with sediment, thereby limiting the useful life of hydropower projects.⁴⁹

Because melting and receding glaciers form glacial lakes and can cause GLOFs, climate change, which is accelerating the pace of glacial retreat, is increasing the number and size of glacial lakes, as well as the number and severity of GLOFs in mountain

Id.

44. *Id.* at 17 (ranking as “high” (1) the certainty of climate change’s impacts on water resources and hydropower development, (2) the “urgency” of the impacts, (3) the severity of the impacts, and (4) the importance of the resource); WORLD WILDLIFE FED’N (WWF), AN OVERVIEW OF GLACIERS, GLACIER RETREAT, AND SUBSEQUENT IMPACTS IN NEPAL, INDIA AND CHINA 10 (2005), *available at* <http://assets.panda.org/downloads/himalayaglaciersonreport2005.pdf> (discussing how “[c]limate plays a large role in determining the feasibility of hydro-projects.”).

45. Richard Kattelmann, *Glacial Lake Outburst Floods in the Nepal Himalaya: A Manageable Hazard?*, 28 NATURAL HAZARDS 145, 146 (2003).

46. *Id.* at 146-47.

47. *Id.*

48. *Id.*

49. AGRAWALA ET AL., *supra* note 36, at 17.

areas such as the Himalayas.⁵⁰ The incidence and magnitude of GLOFs is predicted to continue to rise with further global warming.⁵¹

The 2000 EIA acknowledges the general problem of GLOFs. It notes that there are eight known glacial lakes in the area draining into the WSHP, with the surface areas of those lakes ranging from 500 square meters to 800,000 square meters.⁵² It also notes that GLOFs pose a risk of threat to the lives of WSHP workers stationed in GLOF flood zones, and can destabilize the reservoir foreshore, damage project facilities, and reduce the reservoir's storage capacity by increasing the flow of sediment.⁵³ The EIA then asserts that the risks to the WSHP caused by GLOFs can be adequately mitigated by (1) designing the dam so as to be "resistant to GLOF surge waves," and (2) installing a monitoring and warning system to minimize risk to life.⁵⁴

The EIA, however, fails to discuss how climate change is likely to exacerbate the threats posed by GLOFs and to evaluate the project in light of these enhanced risks. The EIA mentions without elaboration that "there is a potential for new [glacial] lakes to form due to the continued retreat of main valley glaciers," but provides no additional analysis regarding the implications of a growing number of glacial lakes, and decreasing stability of those lakes due to increased snow and ice melt.⁵⁵

50. Erica J. Thorson, *On Thin Ice: The Failure of the United States and the World Heritage Committee to Take Climate Change Mitigation Pursuant to the World Heritage Convention Seriously*, 38 ENVTL. L. 139, 142 (2008).

51. UNFCCC, CLIMATE CHANGE: IMPACTS, VULNERABILITIES AND ADAPTATION IN DEVELOPING COUNTRIES 20 (2008).

Global warming is causing the melting of glaciers in the Himalayas. In the short term, this means increased risk of flooding, erosion, mudslide and GLOF in Nepal . . . Because the melting of snow coincides with the summer monsoon season, any intensification of the monsoon and/or increase in melting is likely to contribute to flood disasters in Himalayan catchments. In the longer term, global warming could lead to a rise in the snowline and disappearance of many glaciers causing serious impacts on the populations relying on the [seven] main rivers in Asia fed by melt water from the Himalayas.

Id.

52. 2000 EIA, *supra* note 13, at 71.

53. *Id.* at 153.

54. *Id.* at 154.

55. *Id.*

Significantly, it offers no projections or analysis regarding the impacts the increased occurrence of such floods might have on fundamental issues such as the life of the project, the long-term availability of water, and/or the quality of water in the reservoir. By failing to assess how the project's desirability and viability might be affected by the likely increase in GLOFs, the EIA presents a misleadingly incomplete picture of the WSHP's possible environmental and economic impacts.

ii. Decreased Glacial Melt

Glaciers act as crucial reservoirs that, as they melt, provide freshwater resources and support for rivers.⁵⁶ The loss of Himalayan glaciers and their freshwater storage capacity is projected to eventually cause a reduction in stream flow and resulting shortages of water that is currently relied upon by millions for drinking, agriculture, and industry, and crucial for ecosystem support.⁵⁷ Without adequate glacial melt, some perennial rivers in the Gangetic river basin (including the Ganges River itself), to which the Seti eventually drains, could begin to flow only seasonally.⁵⁸

With respect to the WSHP in particular, as the ability of glaciers to store (and then release) water in the project catchment area decreases, the rate of inflow into the reservoir could also fall.⁵⁹ This, in turn, could dampen fundamental projections regarding the amount of power and revenue the WSHP will generate. Decreased inflow of glacial melt into the WSHP catchment can also negatively impact the quality of water in the reservoir and the quality of water released downstream of the dam and power facilities.⁶⁰ Yet, like the risks posed by increasing

56. IPCC, WORKING GROUP II, *supra* note 38, at 493; WWF, *supra* note 44, at 3.

57. IPCC, WORKING GROUP II, *supra* note 38, at 493; WWF, *supra* note 44, at 3, 27-28; ARGAWALA ET AL., *supra* note 36, at 17; U.N. ENV'T PROGRAMME, GLOBAL OUTLOOK FOR ICE AND SNOW 24 (2007), http://www.unep.org/geo/geo_ice/PDF/full_report_LowRes.pdf.

58. IPCC, WORKING GROUP II, *supra* note 38, at 493.

59. WWF, *supra* note 44, at 7.

60. 2000 EIA, *supra* note 13, at 16 (stating that "[t]he residence of time of stored water in the reservoir is an important parameter to consider when examining water quality"). *Id.* at 122 ("Water quality within the reservoir will primarily be a function of the quality of inflows entering the reservoir, local

GLOFs, the EIA ignores these possible effects of climate change when discussing the project's economic returns and its relationship with and impacts on water use and water quality in the project area and the broader watershed.

iii. Increased Intensity of Precipitation Events

As mentioned above, a third projected effect of climate change on Nepal is an increase of "intense precipitation events (particularly during the monsoon)" that will, in turn, increase the incidence of flooding, landslides, and sedimentation, each of which are highly relevant to the feasibility and design of hydropower projects.⁶¹ When acknowledging and discussing the threats that flooding, landslides, and the accumulation of sediment pose to the WSHP, however, the EIA ignored the issue of climate change and its potential to heighten these risks.⁶² By ignoring these issues, the EIA also fails to address the possibility that the WSHP's power generating capacity might be less and useful life shorter than projected, and that calculations of economic returns to the GoN might consequently be wholly unrealistic.

B. The WSHP and GHG Emissions

Nepal is a party to both the United Nations Framework Convention on Climate Change⁶³ and the Kyoto Protocol.⁶⁴ As a developing country or "non-Annex I" party to those agreements, Nepal does not have any specific obligations to reduce or limit its GHG emissions.⁶⁵ Nevertheless, as is discussed below, even absent such obligations it is important for Nepal to ensure that it is aware of the implications of the WSHP for its net GHG emissions.

climatic conditions, the configuration of the reservoir and the period of impoundment.").

61. ARGAWALA ET AL., *supra* note 36, at 17.

62. *See generally* 2000 EIA, *supra* note 13; 2007 EIA, *supra* note 15.

63. United Nations Framework Convention on Climate Change, May 9, 1992, S. Treaty Doc. No. 102-38, 1771 U.N.T.S. 164, 166, 170 [hereinafter UNFCCC].

64. Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 37 I.L.M. 22, 33 [hereinafter Kyoto Protocol].

65. *Id.* art. 3, Annex B (setting emissions reductions requirements for Annex I Parties).

For one, in the context of negotiations on a multilateral agreement on climate change, many countries are discussing ways to incentivize protection and maximization of carbon sinks through enhancing forest conservation and improving agricultural practices in developing countries.⁶⁶ While it is not clear what mechanisms will be used in a post-Kyoto international climate change agreement to incentivize this protection of carbon storage capability, it is nevertheless becoming increasingly clear that in a world affected by climate change, the ability of domestic lands to store carbon is an asset of developing countries that, although presently difficult to value, should not be discounted.⁶⁷ The EIA states that the WSHP will cause the submergence and/or clearing of thousands of hectares of forests and shrub land that serve as carbon sinks. It also acknowledges that the displacement of thousands of people affected by the dam may place increased pressure on forests in resettlement areas.⁶⁸ The EIA, however, does not include any discussion of what options and assets Nepal may be foregoing by destroying and putting additional pressure on its carbon sinks given the added value of those lands in a world attempting to tackle the challenges of climate change.⁶⁹

66. Many of these discussions have taken place pursuant to and in accordance with a 2007 decision reached by the Parties to the UNFCCC in Bali. That decision is entitled “Reducing emissions from deforestation in developing countries: approaches to stimulate action.” Decision 2/CP.13, at 8, FCCC/CP/2007/6/Add.1 (Mar. 14, 2008). The Copenhagen Accord, taken note of by the UNFCCC Parties at their December 2009 meeting, further emphasized the need to incentivize protection of forests and established a fund, the Copenhagen Green Climate Fund, to help serve that goal. Copenhagen Accord, Decision 2/CP.15, FCCC/CP/2009/11/Add.1 (Dec. 18, 2009).

67. See, e.g., UNFCCC, GOOD PRACTICE GUIDANCE FOR LAND USE, LAND-USE CHANGE AND FORESTRY ACTIVITIES UNDER ARTICLE 3, PARAGRAPHS 3 AND 4, OF THE KYOTO PROTOCOL: DRAFT CONCLUSIONS PROPOSED BY THE CHAIR 7-11, FCCC/SBSTA/2008/L.11 (June 12, 2008) (containing Parties’ suggestions regarding incentivizing forest conservation, including through provision of financial resources and payments); Yemi Katerere, *A Climate Change Solution?*, WORLD FINANCE 104-106 (May-June 2010) (discussing current and possible expanded future use of financial mechanisms to incentivize developing countries to conserve forest lands).

68. 2007 EIA, *supra* note 15, at 27-28.

69. See *supra* notes 67-68, 70; see generally EIA 2000, *supra* note 13; EIA 2007, *supra* note 15; see also WINROCK INT’L NEPAL, THE POTENTIAL OF GENERATING CDM REVENUE FROM HYDROPOWER EXPORTED BY WEST SETI HYDROELECTRIC PROJECT: A FEASIBILITY STUDY REPORT (2006), <http://www.>

The EIA likewise fails to provide adequate information about the net impact that emissions *generated by the project* will have on *Nepal's* GHG account. Reservoirs such as WSHP emit methane (CH₄), a GHG with twenty-one times the global warming potential⁷⁰ of carbon dioxide.⁷¹ While the EIA briefly acknowledges that “some indirect greenhouse gas emissions [will] result from the decomposition of vegetation . . . inundated in the reservoir,”⁷² it does not appear to consider any of the methane emissions downstream of the reservoir though a “forming consensus is that [large dam] downstream . . . emissions might be responsible for a substantial release of CH₄ to the atmosphere.”⁷³ Yet, more fundamentally, the EIA dismisses the significance of those emissions from the reservoir that it does acknowledge by saying that such emissions are small when compared to the emissions *India* will purportedly avoid generating if it can import hydropower from the WSHP.⁷⁴ This GHG accounting, however, which offsets the emissions generated by *Nepal* against the possible emissions reductions in *India*, is not consistent with the current design of international law governing GHG emissions. Under that framework, which holds each nation responsible for its own emissions,⁷⁵ the EIA incorrectly characterizes the WSHP's impacts on Nepal.⁷⁶

adb.org/Clean-Energy/documents/NEP-FS-West-Seti-Hydroelectric.pdf (discussing generally the loss of carbon sinks from the project).

70. U.S. EPA, Methane: Science, <http://www.epa.gov/methane/scientific.html> (last visited Apr. 15, 2009) (a gas's global warming potential is its relative ability to trap heat in the atmosphere).

71. 2000 EIA, *supra* note 13, at 32.

From an environmental viewpoint, water-based energy generation may produce a very minor amount of air pollution, and thus makes a minor contribution to global warming in comparison to fossil fuel power generation. This is in line with Nepal's commitment to the Convention on Climate Change (1992), of which it is a signatory.

Id.

72. *Id.* at 165.

73. Ivan B.T. Lima et al., *Methane Emissions from Large Dams as Renewable Energy Resources: A Developing Nation Perspective*, 13 MITIG. ADAPT. STRAT. GLOB. CHANGE 193, 194 (2008).

74. 2000 EIA, *supra* note 13, at 165.

75. *See generally* UNFCCC, *supra* note 63 (discussing each nation's duties with respect to its own emissions); Kyoto Protocol, *supra* note 64, art. 3, Annex B (imposing on countries the obligation to reduce their own emissions). There are mechanisms under the Kyoto Protocol in which one country can receive

C. The Environmental and Economic Implications of Dam Decommissioning

Factors such as the occurrence of major floods will hasten the rate of sedimentation and consequently shorten the project's lifespan.⁷⁷ Additionally, projected effects of climate change such as increased GLOFs and more intense monsoon storms may increase the rate of sediment accumulation in the reservoir, thereby reducing the amount of revenue the GoN can generate from the project. Although possible effects exacerbated by climate change are directly relevant to analysis of the WSHP's environmental and economic impacts, the EIA does not consider them. But even more striking is the EIA's silence on the environmental and economic impacts of dam decommissioning.

Dam decommissioning is "the full or partial removal of an existing dam or its associated facilities or significant changes to the operations."⁷⁸ It can involve either "mothballing" the project (i.e., suspending all operations but maintaining the equipment in working conditions so that operation can be resumed), or abandoning it (i.e., stopping all operations, disposing of equipment and materials and essentially abandoning the site).⁷⁹ Based on the EIA's conservative predictions regarding the rate of sediment deposition in the reservoir, decommissioning in the form of abandonment will likely be necessary for the WSHP within fifty years of the start of the project's operation.⁸⁰ By that time, the project will have been transferred to the GoN, which

credits for reducing emissions in another country. Under one such mechanism, the Clean Development Mechanism (CDM), it may be possible for Nepal to receive credits for reducing emissions in India. *See* Kyoto Protocol, *supra* note 64, art. 12 (defining the CDM). There are, however, certain criteria that a project must meet before it is eligible for CDM credits, including that the project supports sustainable development and that it represents "additional" emissions reductions that would otherwise not have occurred. No large dams have qualified for CDM credits. Moreover, even if they were to qualify for CDM credits, certain carbon markets such as the European Trading Scheme do not allow trading of credits generated from large hydropower projects such as the WSHP. *See generally* WINROCK INT'L NEPAL, *supra* note 69 (discussing the possibility of generating CDM credits from the WSHP).

76. 2000 EIA, *supra* note 13, at 166-67.

77. 2000 EIA, *supra* note 13, at 61-62.

78. PRELIMINARY DECOMMISSIONING PLAN, *supra* note 27, at 2.

79. *Id.* at 2.

80. *Id.* at 6-7.

will consequently bear full responsibility for “[p]reparation and implementation of [a] Detailed Decommissioning Plan.”⁸¹

Although the EIA makes no mention of the economic, environmental, or technical issues associated with dam decommissioning, a “Preliminary Decommissioning Plan” prepared by SMEC-WSHL provides an indication of the enormity of the decommissioning task. Abandoning the project will require, among other actions, the GoN to develop and implement a plan to perform a hazard and risk assessment of dam stability; indefinitely perform monthly safety and stability inspections of the dam; indefinitely perform biannual inspections of the transmission line’s safety and stability; entomb the underground power station; de-energize the transmission line; remove and dispose of surface facilities or transfer them to local communities; remove and dispose of movable equipment and property, including hazardous materials likely to be present such as oil, grease, petroleum contaminated materials, batteries, and water treatment sludge; assess and mitigate impacts of decommissioning on the human uses and aquatic ecosystems of the reservoir and downstream water resources; prepare a budget for and fund decommissioning activities; and provide and train personnel to perform decommissioning tasks.⁸²

Those items suggest that the resources necessary to prepare and follow a Detailed Decommissioning Plan for the WSHP will be significant. Yet the EIA makes no attempt to assess, quantify, or even discuss the possible or projected costs of this evidently inevitable aspect of the WSHP’s life cycle. Its silence on the issue prevents the EIA from being able to offer an accurate portrayal of the project’s impacts.

IV. RIGHTS VIOLATIONS ARISING OUT OF THE WSHP AND ITS INADEQUATE EIA

The EIA prepared for the WSHP fails to address the impacts of climate change on the project, the project’s impacts on GHG emissions, and the myriad issues related to decommissioning the project. These omissions present a misleading view of the project by ignoring fundamental risks to its economic viability,

81. *Id.* at 2.

82. *Id.* at 2-11.

environmental impacts, and long-term consequences for the people of Nepal. The ignored impacts of climate change on the project could terminate the project's useful life earlier than expected, thereby decreasing the amount of revenue to be generated by the project for the GoN, and leaving the people of Nepal with a massive structure for which they may owe significant debts and be perpetually liable. Climate change impacts could also change the EIA's assumptions about the water quality in the reservoir and downstream of the dam, with possible negative—but unexplored—social and environmental impacts.

Due to the centrality of the omitted information to an assessment of the costs and benefits of the WSHP, approval of the project based on the deficient EIA violates the rights of Nepalese people to information, to social justice, and to a clean environment—rights that are enshrined in the Nepalese constitution and supported and informed by international law. The parties responsible for these violations include the GoN, which approved the EIA in breach of its duties to protect its citizens and the environment; the ADB, which is financially supporting the project in violation of its own internal policies, international baseline standards of conduct for financial institutions, and its obligation under international law to respect the human rights of those affected by its actions; and SMEC/SMEC-WSHL, the private proponents of the project who are responsible for preparing the deficient EIA and whose actions are inconsistent with their duties to respect human rights and their obligations under the OECD Guidelines for Multinational Enterprises (Guidelines).⁸³ There are, however, mechanisms for holding these actors to account. In order to advocate efforts to do so, this section first argues more specifically how the WSHP and its deficient EIA violate the human rights of Nepali people. The following section then suggests strategies advocates can use to cure these violations and seek accountability. Throughout the

83. ORG. FOR ECON. COOPERATION & DEV. (OECD), OECD GUIDELINES FOR MULTINATIONAL ENTERPRISES 19 (2000), <http://www.oecd.org/dataoecd/56/36/1922428.pdf>; see also John Ruggie, *Promotion and Protection of all Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development: Protect, Respect and Remedy: a Framework for Business and Human Rights*, U.N. Doc. A/HRC/8/5 (Apr. 7, 2008) (discussing “the State duty to protect against human rights abuses by third parties, including business; [and] the corporate responsibility to respect human rights”).

discussion, it must also be kept in mind that the strategies advocated do not mean to be an anti-development or “No-Dam” campaign per se, but a “No-Bad-Development” campaign designed to ensure compliance with principles of informed sustainable development.⁸⁴

A. The Right to Information

Article 27 of Nepal’s Interim Constitution specifically guarantees a right to information, stating that a fundamental right of every citizen is “the right to demand or obtain information on any matters of his/her own or of public importance.”⁸⁵ This right—fulfillment of which is often described as a precondition to exercise other fundamental human rights⁸⁶—is similarly recognized by States worldwide,⁸⁷ emphasized in a host of international agreements and declarations,⁸⁸ and elaborated upon through judicial decisions.⁸⁹ It is, as the United

84. See Dipak Gyawali, *Epilogue*, in THE NEPAL-INDIA WATER RESOURCES RELATIONSHIP: CHALLENGES, 295, 300 (Dwarika N. Dhunkel & Santa B. Pun eds., 2009). As opposed to,

Euro-American and environmental activists, whose concerns lie more in stopping excess development of water structures, Nepali activists . . . are more concerned with stopping bad developments but promoting good ones. Indeed, given that much of the population in the Southern countries still do not have access to electricity, clean drinking water, basic flood protection and reliable irrigation, storage and diversion dams have to be built: the debate in the South is really about how good ones can be built and bad ones avoided. This has been expressed as the slogan of ‘No Bad Dams!’ rather than ‘No Dams’ of the northern NGOs.

Id.

85. INTERIM CONST. OF NEPAL art. 27 (2007).

86. See *infra* notes 86-87 and accompanying text.

87. Nathalie Bernasconi-Osterwalder, *Transparency, Participation and Accountability in International Economic Dispute Settlement: A Sustainable Development Perspective*, in SUSTAINABLE DEVELOPMENT IN INTERNATIONAL AND NATIONAL LAW 321, 328 (Hans Christian Bugge & Christina Voigt eds., 2008) (stating that as of 2006, at least sixty-eight countries had enacted laws protecting freedom of information).

88. See, e.g., International Covenant on Civil and Political Rights, art. 19, Dec. 16, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR]; Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, June 25, 1998, United Nations Economic Commission for Europe, 38 I.L.M. 517 (enacted 2001).

89. See, e.g., *Öneryildiz v. Turkey*, 41 Eur. Ct. H.R. 20 ¶ 62 (2004) (Grand Chamber) (stating that in certain cases involving dangerous activities, “public

Nations General Assembly recognized in its first session in 1946, “a fundamental right and . . . the touchstone of all freedoms to which the United Nations is consecrated.”⁹⁰ Likewise, the International Covenant on Civil and Political Rights (ICCPR) affirms both the right to “seek, receive and impart information” and the role of that right as an essential component of another key element of democracy, the right to freedom of expression.⁹¹

The right is further recognized as being integral to environmental protection and sustainable development.⁹² Principle 10 of the Rio Declaration adopted at the 1992 United Nations Conference on Environment and Development (UNCED) emphasizes that because “[e]nvironmental issues are best handled with the participation of all concerned citizens . . . [a]t the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities.”⁹³ Agenda 21, also adopted at UNCED, elaborates on the importance of the right to sustainable development:

[I]n the specific context of environment and development, the need for new forms of participation has emerged. *This includes a need for individuals, groups and organizations to participate in environmental impact assessment procedures*, and to know about and participate in decisions, particularly those that potentially affect the communities in which they live and work. Individuals, groups and organizations should have access to information relevant to environment and development held by national authorities,

access to clear and full information is viewed as a basic human right” in Europe).

90. G.A. Res. I/59, ¶ 1, U.N. Doc. A/RES/I/59 (Dec. 14, 2006).

91. International Covenant on Civil and Political Rights, art. 19 (stating “[e]veryone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information . . .”).

92. See generally NEIL CRAIK, *THE INTERNATIONAL LAW OF ENVIRONMENTAL IMPACT ASSESSMENT: PROCESS, SUBSTANCE AND INTEGRATION* 77-82 (2008) (discussing the links between access to information, EIAs, and sustainable development).

93. U.N. Conference on Env’t & Dev., Rio Declaration on Environment and Development, U.N. Doc. A/CONF.151/5/Rev.1, 31 I.L.M. 874 (1992) [hereinafter Rio Declaration].

including information on . . . activities that have or are likely to have a significant impact on the environment. . . .⁹⁴

Refining and strengthening these principles, more than forty countries have ratified the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention), which establishes minimum standards countries must comply with to, among other obligations, guarantee and protect their citizens' rights of access to information.⁹⁵ The Aarhus Convention details "passive" government obligations—i.e., obligations to respond to requests for information—and "active" obligations—i.e., obligations to collect, update, and disseminate information.⁹⁶ Likewise, the UNFCCC, to which Nepal is a party, contains "active" obligations to collect and disseminate information relating to global warming, stating that "Parties shall . . . [t]ake climate change considerations into account . . . in their relevant social, economic and environmental policies and actions . . . [and] [p]romote and facilitate . . . public access to information on climate change and its effects."⁹⁷

94. U.N. Conference on Environment and Development, *Agenda 21*, ¶ 23.2 (1992) (emphasis added) [hereinafter *Agenda 21*]. See also Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay) (Judgment of April 20, 2010) ¶¶ 203-205 (stating that preparation of environmental impact assessments in certain circumstances is now a requirement under international law).

95. Convention on Access to Info. & U.N. Econ. Comm'n for Eur., *Public Participation in Decision-making and Access to Justice in Environmental Matters*, June 25, 1998, 38 I.L.M. 517; see also Benjamin W. Cramer, *The Human Right to Information, the Environment and Information about the Environment: From the Universal Declaration to the Aarhus Convention*, 14 COMM. L. & POL'Y 73 (2009) (discussing the Aarhus Convention).

96. U.N. Econ. Comm'n for Eur., *Aarhus Convention: Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters: Content of the Convention: Access to Information*, <http://www.unece.org/env/pp/contentofaarhus.htm> (last visited Apr. 29, 2009).

97. UNFCCC, *supra* note 63, art. 6(a)(ii); see also *id.* art. 4(i) (stating that Parties "shall . . . [p]romote and cooperate in education, training and public awareness related to climate change and encourage the widest participation in this process, including that of non-governmental organizations"); Kyoto Protocol, *supra* note 64, art. 10(e) (stating that each Party "shall . . . facilitate at the national level public awareness of, and public access to information on, climate change.").

These connections between the right to information, environmental protection, and sustainable development are similarly evident in the domestic laws of Nepal, which give content to the right to information in the environmental context through its rules regarding assessment of and disclosure of information in EIAs.⁹⁸ Pursuant to the Environment Protection Rules, 1997, proponents of projects meeting certain thresholds (e.g., mining projects requiring relocation or resettlement of more than 100 people, or hydropower projects capable of generating more than 5 megawatts) must collect and publicly disclose information relating to technical, geographic, environmental, economic, social, cultural, and physical aspects of the proposals, including possible direct, indirect, and cumulative impacts of the project, both positive and negative.⁹⁹ The information must also describe impacts over the short, medium and long-term, discuss consequences of non-implementation of the project, explain options for reducing environmental impacts, and provide references supporting its contents.¹⁰⁰ The scope of EIAs—and, therefore, the information to be automatically disclosed to the public regarding covered projects—is broad.

Domestic environmental laws and Nepal's obligations under relevant international law such as the UNFCCC thus entitle Nepalese citizens to receive an EIA of the WSHP that fairly discloses its impacts, and that includes information about the effects of climate change.¹⁰¹ The EIA upon which the WSHP's approval has been based, however, fails to meet those criteria; and the crucial information it omits renders the information it

98. *See generally* CRAIK, *supra* note 92, at 77-82 (discussing the links between access to information, EIAs, and sustainable development in international law).

99. Environment Protection Rules, 1997, Schedule 6, Matters to be Mentioned While Preparing Reports Relating to Environmental Impact Assessment, *available at* <http://www.unep.org/bpsp/EIA/Case%20Studies/NEPAL%20%28EIA%29.pdf> (Schedule 6 to the Environment Protection Rules of 1997 is available on pages 71-72 of this document).

100. *Id.*

101. For a discussion of how the law has evolved to incorporate climate change issues into environmental impact assessments, *see* CRAIK, *supra* note 92, at 212-15. The developments Craik discusses in Canada can also be seen in the United States. *See, e.g.,* Michael B. Gerrard, *Climate Change and the Environmental Review Process*, 22 NAT'L RESOURCES & ENV'T 20 (Winter 2008) (discussing developments in the United States regarding using the impact assessment process to address climate change issues); *see also supra* note 35.

does present about the economic and environmental impacts of the project misleading.¹⁰² As the content of the right to information has evolved and been informed by principles of sustainable development,¹⁰³ governments' responsibilities to protect the rights of its citizens,¹⁰⁴ and third-parties' obligations to do no harm,¹⁰⁵ the right to information now can be seen as imposing on governments active obligations to ensure the dissemination of accurate information. When government officials are responsible for reviewing and approving documents such as EIAs, this "active" interpretation of the right to information means they have a duty to ensure the information provided is—at a minimum—not facially misleading. This obligation is especially strong in the cases when those most impacted by major development projects are traditionally marginalized and oppressed groups who face significant hurdles in taking independent steps to seek and obtain relevant information. To read the content of the right to information otherwise would essentially render the right meaningless in circumstances when its guarantees are likely needed most.

Consequently, by approving the deficient EIA, SMEC-WSHL, the GoN and ADB violated the rights of the people of Nepal to information regarding the development of a massive infrastructure project.

102. *See infra* Part II.

103. *See generally supra* notes 91-97.

104. *See, e.g.*, John Ruggie, *Promotion and Protection of all Human Rights, Civil, Political, Economic, Social and Cultural Rights, Including the Right to Development: Protect, Respect and Remedy: a Framework for Business and Human Rights*, U.N. Doc. A/HRC/8/5, ¶ 5 (Apr. 7, 2008) ("[T]he State duty to protect . . . lies at the very core of the international human rights regime."); Report of the Special Representative of the Secretary General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, John Ruggie, *Addendum: State Obligations to Provide Access to Remedy for Human Rights Abuses by Third Parties, Including Business: An Overview of International and Regional Provisions, Commentary and Decisions*, U.N. Doc. A/HRC/11/13/Add.1, ¶ 2 (May 15, 2009) ("The State duty to protect is grounded in international human rights law. Guidance from international human rights bodies suggests that the duty applies to all recognized rights that private parties are capable of impairing and to all types of business enterprises.").

105. *See, e.g., id.* ¶¶ 51-81 (discussing transnational corporations' duties to respect human rights).

B. The Right to Public Participation and Social Justice

Related to and dependent upon the right to information, is the right to public participation in decision-making.¹⁰⁶ That right, as enshrined in Article 21 of Nepal's Interim Constitution, guarantees groups such as women, indigenous tribes, and poor peasants and laborers "who are economically, socially or educationally backward . . . the right to participate in the state mechanism on the basis of proportional inclusive principles."¹⁰⁷ Like the right to information, various international texts, treaties and judicial decisions affirm this right of citizens to participate in decision-making, and further emphasize the importance of ensuring that traditionally marginalized groups such as women, racial minorities, and indigenous peoples are accorded adequate participatory opportunities. These texts and decisions also link the right to participate with the principle of sustainable development, treating the former as being instrumental to and necessary for achievement of the latter.

The World Charter for Nature, a 1982 resolution of the United Nations General Assembly, states the general principle, declaring that "[a]ll persons in accordance with their national legislation, shall have the opportunity to participate, individually or with others, in the formulation of decisions of direct concern to their environment."¹⁰⁸ The United Nations resolution on the Declaration on the Right to Development, passed by the General Assembly in 1986, indicates that States should do more than simply permit participation, but "*should [also] encourage* popular participation in all spheres as an important factor in development."¹⁰⁹ The Declaration on the Right to Development further proclaims that "States have the right and the duty to formulate" their national development plans "on the basis of [their populations'] active, free and meaningful participation."¹¹⁰

106. Dinah Shelton, *Environmental Rights*, in PEOPLES' RIGHTS 185, 203 (Philip Alston ed., 2001).

107. INTERIM CONSTITUTION OF NEPAL art. 21 (2007).

108. World Charter for Nature, G.A. Res. 37/7, Principle 23, U.N. Doc. A/37/51 (Oct. 28, 1982).

109. Declaration on the Right to Development, U.N. G.A. Res. 41/128, art. 8(2) (Dec. 14, 1986) (emphasis added).

110. *Id.* art. 2(3).

The Rio Declaration similarly acknowledges a right to participation, and links it with principles of sustainable development. It appears to go beyond the Declaration on the Right to Development's suggestion that States "should encourage" public participation, stating instead that "each individual shall have . . . the opportunity to participate in decision-making processes," and that "States *shall facilitate and encourage* public . . . participation by making information widely available."¹¹¹

The Rio Declaration also specifically addresses participatory rights of vulnerable or frequently marginalized groups, emphasizing in Principles 20, 21, and 22, respectively, the importance of ensuring women, the youth, and indigenous people are able to participate in decision-making in order to achieve sustainable development.¹¹² The Convention on the Elimination of All Forms of Discrimination Against Women likewise stresses the need for government to take affirmative steps to guarantee equal and widespread enjoyment of participatory rights, requiring "States Parties . . . to ensure to . . . women [in rural areas] the right [t]o participate in the elaboration and implementation of development planning at all levels."¹¹³ The ILO Convention Concerning Indigenous and Tribal Peoples in Independent Countries contains numerous provision requiring State Parties to consult with and ensure the participation of indigenous groups in a wide range of contexts relating to land and resource use and development planning.¹¹⁴

111. Rio Declaration, *supra* note 93, princ. 10 (emphasis added).

112. *Id.* prins. 20-22.

113. Convention on the Elimination of All Forms of Discrimination Against Women, art. 14(2)(a), 1249 U.N.T.S. 513 (Dec. 18, 1979).

114. *See, e.g.*, ILO Convention Concerning Indigenous and Tribal Peoples in Independent Countries, ILO Conv. No. 169, 72 ILO Official Bull. 59, art. 6(1)(a) (June 27, 1989) (requiring governments to "consult the peoples concerned . . . whenever consideration is being given to legislative or administrative measures which may affect them directly"); *id.* art. 6(1)(b) (stating governments should "establish means by which [indigenous] peoples can freely participate, to at least the same extent as other sectors of the population, at all levels of decision-making in the elective institutions and administrative and other bodies responsible for policies and programmes which concern them"); *id.* art. 7(1) ("The peoples concerned . . . shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly.").

With respect to climate change in particular, the UNFCCC declares that State Parties shall “encourage the widest participation” in the process of addressing climate change.¹¹⁵ Again, one mechanism for ensuring realization of the right to public participation that is both codified by Nepal’s domestic legislation and promoted in international texts is the use of environmental impact statements.¹¹⁶

Nepal’s Environment Protection Rules, 1997, which form part of the country’s strategy to fulfill the objectives of Agenda 21 and to “empower local bodies, women, indigenous people, and dalits¹¹⁷ to participate in the mainstream of development,”¹¹⁸ contain provisions requiring involvement of the public in preparation of EIAs and allowing them to review EIAs’ findings. Those rules, more specifically, obligate project proponents to provide opportunities for “concerned individuals and institutions” to comment on the scope of an impending EIA, and to attend and make comments at hearings regarding the impacts of the proposed project.¹¹⁹

As noted in the EIA, the FWDR where the WSHP is located is one of the least developed and poorest regions of the country, with low rates of literacy and high rates of landlessness, rendering many households and communities in the region particularly vulnerable to impacts of the project such as loss of private and communal property, and disrupted or severed access

115. UNFCCC, *supra* note 63, art. 4(1)(i).

116. *See, e.g.*, Rio Declaration, *supra* note 93, princs. 10, 17; *Agenda 21*, *supra* note 94, ch. 23, pmbll., ¶ 23.2.

117. SMEC-WSHL describes the term “Dalit” in Vulnerable Community Development Plan as follows:

In Nepal, the term Dalit traditionally connotes the untouchables, low castes and castes from whom water is not accepted and whose touch requires purification by the ‘holy water’. Of late, this term has also been used to refer to the disadvantaged, downtrodden, marginalized and oppressed groups. Dalit is not a homogeneous group, and its heterogeneity extends to language, religion and culture.

SMEC-WSHL, *Vulnerable Community Development Plan: Main Report*, at 28 (Oct. 2008), available at <http://www.wsh.com.np/documents/>.

118. Nepal Ministry of Env’t, Sci. & Tech., *World Summit on Sustainable Development (Rio+10) National Assessment Report 2002: Nepal*, <http://www.most.gov.np/en/environment/devassessment.php> (last visited Apr. 30, 2009).

119. Environment Protection Rules, 1997, *Chapter 2, Initial Environmental Examination and Environmental Impact Assessment*, ¶¶ 4, 7.

to social services and connections.¹²⁰ Of these vulnerable groups, Dalit and female-headed households in the region are considered to be especially exposed to project-induced disruptions.¹²¹ Efforts to facilitate and encourage effective participation, therefore, must take these considerations into account by, for example, presenting and accepting information orally well as through written exchanges.

Some non-governmental organizations who have interviewed people living in FWDR, however, report that participatory rights are not being respected: local citizens describe not having access to the EIA, being denied requests for information about environmental impacts of the project, and being precluded from providing their comments regarding the project.¹²² The problem, however, is even more basic than that in that even if the information contained in the EIA were disclosed in writing and through meetings in local languages, the residents would nevertheless still be denied the ability to meaningfully participate in analysis and development of the project because of the EIA's significant omissions.¹²³ Real participation depends on having access to relevant information.¹²⁴ As prepared by SMEC-WSHL and approved by the GoN and ADB, however, the EIA only superficially permits participation.¹²⁵ Such participation does not satisfy the rights of participation guaranteed under the Nepali Constitution and informed by domestic and international law.

120. SMEC-WSHL, *supra* note 117, at ix-2; *see also* 2000 EIA, *supra* note 13, at 93-114.

121. SMEC-WSHL, *supra* note 117, at ix-2.

122. *See* JAPAN CENTER FOR A SUSTAINABLE ENVIRONMENT AND SOCIETY, REPORT ON THE WEST SETI HYDROELECTRIC PROJECT AND ADB POLICY VIOLATIONS (Version 2) (2007), *available at* http://www.jacses.org/sdap/westseti/JACSES_Report_on_West_Seti.pdf.

123. *See infra* Part II.

124. *See generally* Rio Declaration, *supra* note 93, princ. 10 (stating that "States shall facilitate and encourage public . . . participation by making information widely available"); Gregory H. Fox & Brad R. Roth, *Introduction: The Spread of Liberal Democracy and Its Implications for International Law*, in *DEMOCRATIC GOVERNANCE AND INTERNATIONAL LAW* 1, 14 (Gregory H. Fox & Brad R. Roth eds., 2000) (stating that "the proper conditions' for the exercise of popular will" are that choices be "genuinely knowing (based on good information), willing (not merely a choice among options imposed by the will of elites or by circumstance), and intelligent (taken in circumstances that allow for proper reflection)).

125. *See infra* Part II.

C. The Right to a Clean Environment

Article 16 of Nepal's Interim Constitution grants "[e]very person . . . the right to live in a clean environment."¹²⁶ Seemingly indeterminate, this broad right also gains content through reference to other rights and obligations under domestic Nepali law and principles of international law.

More specifically, government abdications of statutory duties to protect the environment can give rise to a breach of the right to a clean environment.¹²⁷ Similarly, violations of other often complementary rights as "rights to life, association, expression, information, political participation, personal liberty, equality and legal redress . . . can be and have been invoked to further environmental goals," and thus can be cited to establish a violation of the right to a clean environment.¹²⁸

Another important candidate source of guidance for the interpretation of the right are the "Responsibilities, Directive Principles and Policies of the State" enshrined in Part Four of the Interim Constitution.¹²⁹ Among the relevant responsibilities and principles are those providing that the "*State shall* (1) "make necessary arrangements to maintain [a] clean environment," (2) "give priority to the protection of the environment, and also to the prevention [of] its further damage due to physical development activities," (3) make provisions for the "protection of the forest, vegetation and biodiversity [and] its sustainable use, and for equitable distribution of the benefits derived from it,"¹³⁰ and (4)

126. INTERIM CONST. OF NEPAL art. 16 (2007).

127. *See, e.g.*, Advocate Prakash Mani Sharma for Pro Pub. v. His Majesty Gov't Cabinet Secretariat and others, WP 2991/1995 (June 9, 1997), *available at* <http://www.elaw.org/node/1391> (citing government breaches of statutory duties in support of its holding that the government was not fulfilling with its obligations to protect the environment).

128. Shelton, *supra* note 106, at 218.

129. INTERIM CONST. OF NEPAL pt. 4 (2007). Although the Interim Constitution specifies that these responsibilities, principles, and policies do not create any enforceable rights, the Supreme Court of Nepal has held that such constitutionally enshrined guidelines nevertheless have meaning for evaluating whether government actions are valid, and can be given effect through court order. Advocate Prakash Mani Sharma for Pro Pub. v. His Majesty Gov't. Cabinet Secretariat & Others, WP 2991/1995 (June 9, 1997), *available at* <http://www.elaw.org/node/1391>.

130. INTERIM CONST. OF NEPAL art. 35(5) (2007) (emphasis added).

“use existing natural resources including water resources of the country for the interest of the nation.”¹³¹

International law regarding the scope and content of the right to a clean environment is also instructive. Because the GoN’s actions are inconsistent with its obligations under the UNFCCC to “[t]ake climate change considerations into account . . . in [its] relevant social, economic and environmental policies and actions,” with the ICCPR’s guarantees of rights to life, liberty and security of person,¹³² and with the Rio Declaration’s principle that States must fulfill their development goals “so as to equitably meet developmental and environmental needs of present and future generations,” such actions are also inconsistent with Nepali citizens’ rights to a clean environment.

Based on these principles, the approval of the WSHP—a project which will inundate thousands of hectares of land, involve the relocation of thousands of people, and will consume the limited resources of the GoN, and yet which, due to the EIA’s failure to evaluate the impacts of climate change or evaluate the entire life of the project, likely has significant unknown but major environmental and economic implications for present and future generations of Nepali people—violates the right to a clean environment set forth in the Interim Constitution.

131. *Id.* art. 33(o).

132. Several national and international courts have held that the right to life, liberty, and/or security is infringed in certain cases involving environmental harm. The Federal High Court of Nigeria, for example, held that multinational oil companies violated “fundamental rights to life (including healthy environment) and dignity of human person” by flaring gas. *Gbemre v. Shell Petroleum Dev. Co. Nig. Ltd.*, No. FHC/B/CS/53/05, at 30 (F.H.C. Nov. 14, 2005), available at <http://www.climatelaw.org/cases/case-documents/nigeria/ni-shell-nov05-judgment.pdf>. The European Court of Human Rights, in a 1995 decision, found that the petitioner’s rights to privacy and family security were violated by the Spanish government’s failure to “stri[k]e a fair balance between the interest of the town’s economic well-being—that of having a waste-treatment plant—and the applicant’s effective enjoyment of her right to respect for her home and private family life.” *Lopez Ostra v. Spain*, 20 Eur. Ct. H.R. 277, ¶¶ 6, 44 (1995). For a discussion of these and additional cases, see Svitlana Kravchenko, *Right to Carbon or Right to Life: Human Rights Approaches to Climate Change*, 9 VT. J. ENV’T L. 513 (2008).

V. POSSIBLE MECHANISMS FOR ADDRESSING VIOLATIONS OF HUMAN RIGHTS CAUSED BY THE WSHP

Various actors are involved in pursuing development of the WSHP, and also play a consequent role in infringing the rights of the Nepali people to information, social justice, and a clean environment. There exist, however, promising mechanisms to seek accountability for at least three of these key players: the GoN, SMEC/SMEC-WSHL, and the ADB.

A. Pursuing Public Interest Litigation in Nepal

In Nepal, citizens can seek to hold their government accountable for violations of Articles 16, 21, and 27 by filing a public interest action under Article 107 of the Interim Constitution. The provision states:

The Supreme Court shall, for the enforcement of the fundamental rights conferred by this Constitution, for the enforcement of any other legal right for which no other remedy has been provided or for which the remedy even though provided appears to be inadequate or ineffective, or for the settlement of any constitutional or legal question involved in any dispute of public interest or concern, have the extraordinary power to issue necessary and appropriate orders to enforce such rights or settle the dispute. For these purposes, the Supreme Court may, with a view to imparting full justice and providing the appropriate remedy, issue appropriate orders and writs including the writs of *habeas corpus*, *mandamus*, *certiorari*, prohibition and *quo warranto*.¹³³

The Supreme Court of Nepal has interpreted this provision to grant broad rights of standing,¹³⁴ and public interest groups have

133. INTERIM CONST. OF NEPAL art. 107(2) (2007).

134. *See, e.g.*, Advocate Prakash Mani Sharma for Pro Pub. v. His Majesty Gov't. Cabinet Secretariat & Others, WP 2991/1995 (1997), *available at* <http://www.elaw.org/node/1391> (holding that the petitioner had standing to bring an action to enforce a principle set forth under Part Four of the Constitution); Suray Prasad Sharma Dhungel v. Godavari Marble Industries & Others, WP 35/1992 (Oct. 31, 1995), *available at* <http://www.elaw.org/node/1849>

accordingly successfully exploited the opportunities afforded by that provision to enforce human rights, including the right to information regarding a dam development project¹³⁵ and the right to a clean environment.¹³⁶ Based on these prior successes, one advisable strategy would be for public interest groups challenging the implementation of the WSHP to file an action seeking to halt the project and obtain an order compelling the GoN to require SMEC-WSHL to prepare an adequate EIA.

B. Filing a Petition with the National Human Rights Commission in Nepal

A second strategy targeting the GoN is to file a petition with the National Human Rights Commission (NHRC), arguing, like the petition to the Supreme Court would, that the GoN's approval of the deficient EIA violates the rights of Nepali people to information, social justice, and a clean environment. The NHRC, which was established under the Interim Constitution in 2007 in order to fill the role of a body compliant with the so-called "Paris Principles,"¹³⁷ has a broad mandate to promote and protect human rights in the country, powers to conduct inquiries and investigations on its own initiative or in response to a petition or

(holding that petitioner environmental groups had standing to bring an action to enforce the right to a clean environment as part of the right to life). These cases were brought under a similar provision in the prior version of the Nepali Constitution.

135. See, e.g., Himalayan and Peninsular Hydro-Ecological Network, Successful Campaigning Against Large Dams: The Shelving of Arun III, <http://www.bothends.info/service/ip-dam.htm#successful> (last visited Apr. 30, 2010) (describing the case in which NGOs prevailed in an action to seek information regarding the development of the proposed so-called "Arun III" 201 MW hydropower project); Alfred Escher, *World Bank Withdraws from Arun III Project at Inspection Panel's Recommendation*, 3 HUM. RIGHTS BRIEF 1 (1995), available at www.wcl.american.edu/hrbrief/v3i1/wldbnc31.htm.

136. See, e.g., Suray Prasad Sharma Dhungel v. Godavari Marble Indus. & Others, WP 35/1992 (Oct. 31, 1995), available at <http://www.elaw.org/node/1849>.

137. The "Paris Principles" are the Principles relating to the Status of National Institutions, adopted by United Nations General Assembly in a December 1993 resolution. National Institutions for the Promotion and Protection of Human Rights, G.A. Res. 48/134, Annex, U.N. Doc. A/RES/48/134 (Dec. 20, 1993). The Paris Principles set forth model guidelines for the establishment, role, responsibilities, operation and authority of national institutions "vested with competence to promote and protect human rights." *Id.* ¶ 1.

complaint, and the authority to make recommendations for action against the perpetrator and/or the officials who negligently or recklessly failed to prevent the rights violations.¹³⁸ In performing its functions, the NHRC can “exercise the same powers as the court . . . in requiring any person to appear before [it] for recording his/her statement[,] . . . receiving and examining evidence, [and] ordering . . . the production of any physical proof.”¹³⁹

In the year from July 2007 to June 2008, the NHRC received 1,137 complaints alleging various human rights abuses, including killing, abduction, torture, property seizure, and violations of economic, social and cultural rights.¹⁴⁰ It investigated 728 cases, and issued recommendations or settled 459.¹⁴¹ It also “[h]eld over a dozen . . . dialogues with . . . senior officials of [the GoN]” and with “heads of some corporations . . . on the issues various rights such [the] right to life, right to movement, economic and social rights, [and] rights of prisoners.”¹⁴² It is thus active, but with a workload that might prevent a prompt response. Nevertheless, due to the NHRC’s position as an independent body capable of inquiring into the actions of other government officials, its broad powers, and its ability to issue remedial orders, a petition to it detailing the violations resulting from the submission and approval of the WSHP’s EIA could be an effective way to halt the project to require preparation of a revised EIA.¹⁴³

138. In 2000, the NHRC was established as a statutory body under the Human Rights Commission Act 1997. Part 15 of the Interim Constitution converted it into an independent constitutional body, and now defines its role and responsibilities. National Human Rights Commission (Nepal), *About Us*, http://www.nhrcnepal.org/about_us.php (last visited Apr. 23, 2010); INTERIM CONST. OF NEPAL pt. 15 (2007).

139. INTERIM CONST. OF NEPAL pt. 15, art. 132(3)(i) (2007).

140. NATIONAL HUMAN RIGHTS COMMISSION (NEPAL), ANNUAL PROGRESS REPORT (JULY 2007-JUNE 2008) 1 (2008), *available at* <http://www.nhrcnepal.org/publication/doc/reports/Annual-Report-Eng-2007-08.pdf>. Many of these cases arose out of the conflict between the GoN and the Communist Party of Nepal—Maoist, *see generally id.*

141. *Id.* at 1.

142. *Id.* at 15.

143. Through email correspondence with Nepali activists on human rights and water issues, I learned that they had not pursued filing a complaint with the NHRC because the NHRC’s work had previously been limited to investigation of civil and political rights. The NHRC now, however, also investigates claims of violations of economic, social and cultural rights. Moreover, even if the NHRC’s

C. Filing a Request for Consultation and Compliance Review with the ADB

Petitions to the Supreme Court of Nepal and the NHRC could, in connection with addressing rights' violations facilitated by the GoN's approval of a deficient EIA, seek remedies that stop the infringing conduct of third parties such as the ADB and SMEC-WSHL. An order by either the Supreme Court or NHRC ordering the government to require a new EIA prior to any further progress on the WSHP would effectively require those non-GoN entities to take action to cure the violations. Yet in addition to those indirect routes, there are other avenues available to address the actions of the ADB and SMEC-WSHL parties more directly. One such avenue, which aims at the actions of the ADB in approving the WSHP, is to file a request for consultation and compliance with the ADB.

In order to respond to increasing scrutiny by governments and civil society, and a "shift in development models toward sustainable development," the ADB, like other multinational development banks, began in the 1980s to develop social and environmental policies and accountability mechanisms.¹⁴⁴ As a result of further development of those efforts, the ADB has instituted a "consultation" mechanism allowing individuals (or their representatives) to file complaints alleging that they have, or are likely to be, directly and materially adversely affected by an ADB-assisted project, and that the harm is related to an act or omission of the ADB arising out of its role in the project.¹⁴⁵ If the complaint is eligible,¹⁴⁶ the ADB and the complainants will then

mandate or focus were limited, it could still review this issue given that, as I argue in this paper, the rights violations can also be characterized as violations of civil and political rights.

144. ASIAN DEV. BANK, REVIEW OF THE INSPECTION FUNCTION: ESTABLISHMENT OF A NEW ADB ACCOUNTABILITY MECHANISM, at II (2003), *available at* www.adb.org/documents/policies/ADB_accountability_mechanism/ADB_accountability_mechanism.pdf (last visited Apr. 25, 2010).

145. *Id.* at 17-18.

146. Ineligible requests for consultations include those that: (1) are not related to an act or omission of the ADB; (2) relate to procurement; (3) involve allegations of fraud or corruption; (4) involve completed projects; (5) have already been considered (unless there is new evidence); (6) challenge the adequacy or suitability of an internal ADB policy or procedure; (7) are frivolous, (8) relate to personnel matters; or (9) involve non-operational issues such as finance and administration. *Id.* See also Asian Dev. Bank, The Office of the

engage in a “Consultation Process” in an attempt to identify solutions to the identified problems.¹⁴⁷ Once the consultation request is filed, the complainants may also file a request for “compliance review.”¹⁴⁸ This mechanism is a separate system designed specifically to address the ADB’s violations of its own policies and procedures.¹⁴⁹

Requests for consultation and/or compliance review in the case of the WSHP could raise issues alleging, for example, that the ADB negligently approved a misleading EIA, or that its approval of the EIA was inconsistent with its internal policies regarding environmental impact assessments and dissemination of information and meaningful involvement of stakeholders. It could also argue that the ADB’s approval of the EIA violated baseline standards set forth in the Equator Principles¹⁵⁰ (which were launched by the World Bank and International Finance Corporation and have since been widely adopted by financial institutions worldwide)¹⁵¹ instructing lenders to ensure that, among other tasks, borrowers have: (1) performed an “adequate, accurate, and objective evaluation and presentation”¹⁵² of the “social and environmental impacts, risks, and opportunities of projects”¹⁵³ for key areas of the project’s life-cycle from pre-

Special Project Facilitator Consultation Primer: Procedure for Complaint Handling, <http://www.adb.org/SPF/default.asp> (last visited May 1, 2009), [hereinafter Asian Dev. Bank, Consultation Primer].

147. Asian Dev. Bank, The Consultation Phase of ADB’s Accountability Mechanism, <http://www.adb.org/SPF/default.asp> (last visited May 1, 2009).

148. *Id.* See also Asian Dev. Bank, Consultation Primer, *supra* note 146, at 8-11.

149. See Asian Dev. Bank, Consultation Primer, *supra* note 146, at 8-11.

150. *The Equator Principles: A Benchmark for the Financial Industry to Manage Social and Environmental Issues in Project Financing*, <http://www.equator-principles.com/> (last visited May 1, 2010).

151. Katinka Jesse & Marie-Jose van der Heijden, *Corporate Environmental Accountability as a Means for Intragenerational Equity; ‘Hidden’ Environmental Impacts in the North-South Conflict*, in SUSTAINABLE DEVELOPMENT IN INTERNATIONAL AND NATIONAL LAW 346 (2008) (describing the Equator Principles and noting that over fifty private international operating banks had volunteered to adhere to them).

152. INT’L FIN. CORP., PERFORMANCE STANDARD I: SOCIAL AND ENVIRONMENTAL ASSESSMENT AND MANAGEMENT SYSTEMS 2 (2006), [http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/pol_PerformanceStandards2006_full/\\$FILE/IFC+Performance+Standards.pdf](http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/pol_PerformanceStandards2006_full/$FILE/IFC+Performance+Standards.pdf).

153. *Id.* at i.

construction, through operation, to decommissioning or closure;¹⁵⁴ and (2) “effective[ly engaged the] community. . . through disclosure of project-related information and consultation with local communities on matters that directly affect them.”¹⁵⁵

Such petitions to development banks have proven to be useful advocacy strategies in analogous contexts. Indeed, non-governmental organizations (NGOs) in Nepal had significant success with this strategy when challenging the development of another large dam, the proposed 201 MW Arun III project, in the mid-1990s.¹⁵⁶ Several NGOs filed a petition with the World Bank’s newly created Inspection Panel, arguing that the bank had violated its internal regulations in supporting the project. The Inspection Panel conducted an investigation and found that World Bank policies had in fact been violated in connection with the Arun III project.¹⁵⁷ After receiving the Inspection Panel’s report, the President of the World Bank decided to withdraw the bank’s support from Arun III.¹⁵⁸

Given the rights and policy violations in the case of the proposed WSHP, a similar petition to the ADB could be an important strategy for those seeking to ensure the WSHP, if it proceeds, does not do so at the expense of Nepali citizens’ rights.

D. Filing a Submission with Australia’s National Contact Point Pursuant to the Guidelines

A fourth strategy advocates could use to address rights violations arising out of the WSHP could be to utilize the procedures set forth in the OECD Guidelines for Multinational Enterprises (Guidelines) in order to induce SMEC/SMEC-WSHL’s

154. *Id.* at 2.

155. *Id.* at i.

156. See Erik K. MacDonald, *Playing by the Rules: The World Bank’s Failure to Adhere to Policy in the Funding of Large-Scale Hydropower Projects*, 31 ENVTL. L. 1011 (2001) (discussing the Arun III development project and the World Bank’s review of it); Daniel D. Bradlow, *A Test Case for the World Bank*, 11 AM. U.J. INT’L L. & POL’Y 247 (1996) (also discussing the Arun III development project and the World Bank’s review of it); Himalayan and Peninsular Hydro-Ecological Network, *supra* note 135 (also discussing the same); Escher, *supra* note 135 (also discussing the same).

157. See Bradlow, *supra* note 156, at 280-82.

158. *Id.* at 281 (describing the World Bank’s withdrawal from the project).

compliance with the Guidelines (and respect for the rights of Nepali people) in connection with its pursuit of the WSHP.

The Guidelines are recommendations OECD countries have agreed to make to the multinational enterprises operating within or from their territories in order to promote sustainable development and adherence to standards in such areas as human rights, environmental protection, and corruption.¹⁵⁹ Each OECD country has also committed to have a “National Contact Point” available to review claims regarding its multinationals’ conduct abroad.¹⁶⁰

With respect to the WSHP, two Guideline principles are particularly relevant and could serve as a basis for a submission by advocates to Australia’s NCP (ANCP): namely, the principles that multinationals should (1) “[c]ontribute to economic, social and environmental progress with a view to achieving sustainable development;” and (2) “[r]espect the human rights of those affected by their activities consistent with the host government’s international obligations and commitments.”¹⁶¹ Upon receiving a complaint, the ANCP may investigate the complaint, make its office available to help facilitate a mediated outcome of a specific case, and prepare findings and statements regarding the matter.¹⁶² While the NCP process has been criticized for not

159. OECD, *Declaration on International Investment and Multinational Enterprises*, in GUIDELINES FOR MULTINATIONAL ENTERPRISES 5 (2008), available at <http://www.oecd.org/dataoecd/56/36/1922428.pdf>.

160. OECD, *Implementation Procedures of the OECD Guidelines for Multinational Enterprises*, in GUIDELINES FOR MULTINATIONAL ENTERPRISES 27, 30 (2008), available at <http://www.oecd.org/dataoecd/56/36/1922428.pdf> (requiring parties to establish NCPs for “handling inquiries and discussions with the parties concerned on all matters covered by the Guidelines so that they can contribute to the solution of problems which may arise in this connection”).

161. OECD, *Guidelines for Multinational Enterprises*, in GUIDELINES FOR MULTINATIONAL ENTERPRISES 7, 14 (2008), available at <http://www.oecd.org/dataoecd/56/36/1922428.pdf>; see also *id.* at 19-20 (stating that an environmental impact assessment should be prepared when “proposed activities may have significant environmental, health, or safety impacts,” and that “the lack of full scientific certainty [should not be used] as a reason for postponing cost-effective measures to prevent or minimize such damage”); The Australian National Contact Point for the OECD Guidelines for Multinational Enterprises, The Australian National Contact Point, http://www.ausncp.gov.au/content/contact_point.asp?areaid=18 (last visited Apr. 29, 2009) [hereinafter Australian National Contact Point] (describing its roles and responsibilities and providing links to further information).

162. Australian National Contact Point, *supra* note 161.

living up to its potential to promote adherence to the Guidelines,¹⁶³ NGOs have recently reported being satisfied with the ANCP's willingness to investigate claims.¹⁶⁴ This strategy could therefore be a useful complement to the other three as it would focus attention directly on SMEC/SMEC-WSHL, and would not require a huge investment of resources due to the informal nature of the system and the work already being done in connection with pursuing the other avenues.

VI. ANALOGOUS ISSUES AND SOLUTIONS

The issues highlighted above regarding the importance of assessing impacts on and by climate change are by no means unique to the WSHP. Indeed, that project is just one part of a major undertaking by governments and developers throughout the Himalayan region to develop dams for hydropower, water storage and other purposes over the coming decades—projects which also trigger similar climate change-related considerations.¹⁶⁵ Illustrating the scope of the issue, a 2008 study by International Rivers reported that Nepal, Pakistan, Bhutan and India aim to expand the number of hydropower projects in their Himalayan regions from the 100 currently existing to a future total of 552.¹⁶⁶ The roughly 450 projects already under construction or planned for future development seek to increase current hydropower generating capacity from approximately 35,000 MW to nearly 190,000 MW.¹⁶⁷ These projects, like the WSHP, are in areas extremely vulnerable to and already experiencing some of the most pronounced effects of climate

163. See, e.g., John Ruggie, *Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and other Business Organizations*, A/HRC/8/5, ¶ 98 (Apr. 7, 2008) (“The NCPs are potentially an important vehicle for providing remedy. However, with a few exceptions, experience suggests that in practice they have too often failed to meet this potential.”); OECD Watch, *2008 Review of National Contact Points and Their Implementation of the OECD Guidelines: Submission to the Annual Meeting of NCPs, June 2008*, http://baseswiki.org/w/images/en/7/7d/OECD_Watch_2008_Review_of_National_Contact_Points_and_the_Implementation_of_the_OECD_Guidelines.pdf (last visited Apr. 10, 2009), [hereinafter OECD Watch 2008 Review].

164. OECD Watch 2008 Review, *supra* note 163, at 5.

165. INT'L RIVERS, *supra* note 4, at 6-7.

166. *Id.* at 7.

167. *Id.*

change;¹⁶⁸ and consequently, also like the WSHP, these projects require analysis of how climate change affects projections about their environmental impacts, physical sustainability, economic returns, and ability to advance their development goals.¹⁶⁹

Moreover, the need to take climate change-related considerations into account in major development projects extends beyond the Himalayan region and the specific context of dam development. Scholars, policymakers, and development professionals increasingly recognize the need to systematically integrate analysis of climate change adaptation issues within development activities so as to ensure those undertakings are environmentally and economically sustainable.¹⁷⁰ They likewise

168. *See supra* notes 4, 36-46.

169. *See* INT'L RIVERS, *supra* note 4, at 4, 32-36.

170. *See, e.g.*, OECD, DECLARATION ON INTEGRATING CLIMATE CHANGE ADAPTATION INTO DEVELOPMENT COOPERATION (2006), <http://www.oecd.org/dataoecd/44/29/36426943.pdf> (adopted by Development and Environment Ministers of OECD Member Countries April 4, 2006 and describing the importance of and pledging that the OECD Member Governments “will work to better integrate climate change adaptation in development planning and assistance”); SIMONE GIGLI & SHARDUL AGRAWALA, STOCKTAKING OF PROGRESS ON INTEGRATING ADAPTATION TO CLIMATE CHANGE INTO DEVELOPMENT COOPERATION ACTIVITIES (2007), *available at* <http://www.oecd.org/dataoecd/33/62/39216288.pdf> (discussing growing awareness of need to integrate adaptation planning with development activities and discussing approaches being used to further, and challenges arising from, such integration); WORLD BANK, ENVIRONMENTALLY AND SOCIALLY SUSTAINABLE DEVELOPMENT VICE PRESIDENCY & INFRASTRUCTURE VICE PRESIDENCY, CLEAN ENERGY AND DEVELOPMENT: TOWARDS AN INVESTMENT FRAMEWORK (2006), *available at* [http://siteresources.worldbank.org/DEVCOMMINT/Documentation/20890696/DC2006-0002\(E\)-CleanEnergy.pdf](http://siteresources.worldbank.org/DEVCOMMINT/Documentation/20890696/DC2006-0002(E)-CleanEnergy.pdf) (noting how “[i]t is generally accepted that adaptation needs to be mainstreamed into national planning and finance agendas.”); WORLD BANK, VICE PRESIDENCY FOR SUSTAINABLE DEVELOPMENT, AN INVESTMENT FRAMEWORK FOR CLEAN ENERGY AND DEVELOPMENT: A PROGRESS REPORT (2006), *available at* [http://siteresources.worldbank.org/DEVCOMMINT/Documentation/21046509/DC2006-0012\(E\)-CleanEnergy.pdf](http://siteresources.worldbank.org/DEVCOMMINT/Documentation/21046509/DC2006-0012(E)-CleanEnergy.pdf) [hereinafter WORLD BANK CLEAN ENERGY INVESTMENT FRAMEWORK].

Assessment of climate risks needs to become a regular part of the due diligence of development planning. For this to occur . . . appropriate information and tools for screening for climate risk must be readily available; and new standards for planning and infrastructure must be devised. In the longer term [there must be] “better management of climate variability and its implications in all relevant sectors, including *inter alia*” infrastructure, agriculture, natural resources and health.

Id. at 37-38 (internal citations omitted); CALIFORNIA DEPT. OF WATER RESOURCES, MANAGING AN UNCERTAIN FUTURE: CLIMATE CHANGE ADAPTATION STRATEGIES

increasingly recognize how the imperative to combat climate change and the consequent expanding landscape of foreseeable regulations raising the price on carbon or imposing limits on emissions are factors that should be considered given their possible impacts on projects' economic, environmental, and political feasibility.¹⁷¹

When, as in the case of the WSHP, a development project will have a foreseeable effect on and/or be affected by climate change, government authorities (or other responsible entities) must assess those impacts and disseminate their findings to the public.¹⁷² Failure to do so will not only be unwise from a development perspective, but may also violate affected individuals' human rights to information, public participation and social justice, and a clean environment—rights which are supported and informed by international law,¹⁷³ as well as countries' domestic legal systems.¹⁷⁴ To address or prevent such

(2008), available at <http://www.water.ca.gov/climatechange/docs/ClimateChangeWhitePaper.pdf> (providing an example of government efforts to integrate consideration of adaptation issues within current planning and investment decision-making); Daniel A. Farber, *Adaptation Planning and Climate Impact Assessments: Learning from NEPA's Flaws*, 39 ENVTL. L. REP. 10,605 (2009) (discussing need and mechanisms for ensuring "that we evaluate adaptation needs through a sensible, well-designed process"); Mark Latham, *Environmental Liabilities and the Federal Securities Laws: A Proposal for Improved Disclosure of Climate Change-Related Risks*, 39 ENVTL. L. 647, 649-707 (2009) (This article illustrates various ways in which climate change may impact businesses and investments. Many of these impacts could be reduced or eliminated, however, with appropriate planning and adaptation efforts).

171. See generally, Latham, *supra* note 170, at 658-63 (discussing some of the climate change-related regulatory risks and associated liabilities businesses should take into account); WORLD BANK CLEAN ENERGY INVESTMENT FRAMEWORK, *supra* note 170, at 16 (noting that policies and regulations mandating the use of specific or cleaner technologies, pricing and taxation measures, and caps on emissions all can affect decisions on investment in energy infrastructure). See also *supra* notes 35, 101 (discussing requirements that governments consider projects' possible impacts on climate change).

172. See *supra* Part III.

173. See *supra* Part III. See also Barry E. Hill, Steve Wolfson & Nicholas Targ, *Human Rights and the Environment: A Synopsis and Some Predictions*, 16 GEO. INT'L ENVTL. L. REV. 359, 378-81 (2004) (discussing recognition of the right to a clean and/or healthy environment under international treaties and by international human rights bodies).

174. Various authors have referred to the number of national constitutions incorporating rights to a clean and/or healthy environment, and generally state that there are roughly 100 such constitutions. See, e.g., Kirk W. Junker, *Ethical Emissions Trading and the Law*, 13 U. BALT. J. ENVTL. L. 149, 160 (2006) ("[A]

violations, advocates can use many of the same or analogous mechanisms discussed above in the context of the WSHP. In particular, many domestic courts throughout the world grant broad rights of standing for citizens to seek redress for violations of their constitutional rights, which may often include the rights to information and to a clean environment.¹⁷⁵ Similarly, a host of nations and sub-national government entities have established human rights institutions (“NHRIs”) like Nepal’s NHRC to specifically receive and resolve claims of human rights

survey of constitutions around the world yields more than one hundred constitutions that explicitly include the right to a clean natural environment among the catalogue of individual rights.”); James R. May, *Constituting Fundamental Environmental Rights Worldwide*, 23 *PACE ENVTL. L. REV.* 113, 114-15 (2006).

[O]f the 130 constitutions that address the environment, only about sixty grant individuals what may fairly be characterized as a fundamental right to a ‘clean,’ ‘healthful,’ or ‘favorable’ environment . . . [And] of these sixty, only a handful have earned judicial imprimatur as being enforceable by affected individuals. Yet because most [of these constitutional provisions protecting fundamental environmental rights] are less than a decade old, their transformative repercussions are only beginning to be detected.

Id.; Hill, Wolfson & Targ, *supra* note 173, at 381. “More than ninety national constitutions recognize a duty owed by the national government to its citizens to prevent harm to the environment. Of these, over fifty recognize the importance of a healthy environment, either as a duty of the state or as a right.” *Id.* The authors also note, however, that it is still the “vast minority of countries” in which “courts are finding environmental constitutional provisions self-executing, conveying both procedural and substantive rights.” *Id.* at 382. The right to information is similarly reflected and protected in national law throughout the world. Bernasconi-Osterwalder, *supra* note 87, at 328 (stating that as of 2006 at least 68 countries had enacted laws protecting freedom of information). Indeed, according to one calculation, more than “170 different states, provinces and nations have enacted EIA legislation” promoting assessment and dissemination of information relating to environmental impacts. Nicholas A. Robinson, “*NEPA and the Rest of the World: Models for Strengthening EIA from Many Nations*,” SG026 ALI-ABA 285, 287 (2001) (citing N.A. Robinson, *EIA Abroad: The Comparative and Transnational Experience*, in ENVIRONMENTAL ANALYSIS—THE NEPA EXPERIENCE 679 (Stephen G. Hildebrand & Johnnie B. Cannon eds., 1992); *see also id.* at 290 (stating that “[m]ost developing nations have enacted EIA legislation”).

175. *See* Hill, Wolfson & Targ, *supra* note 173, at 382-89 (discussing legal actions to protect human rights to a clean and/or healthy environment (rights which are sometimes derivative of other rights such as the right to life) under the constitutions of India, the Philippines, Columbia, Chile).

violations.¹⁷⁶ Further, when international financial institutions such as the ADB, African Development Bank, Inter-American Development Bank, European Bank for Reconstruction and Development, International Finance Corporation and World Bank support the challenged projects, advocates may also seek review and relief from those entities' internal accountability and compliance mechanisms.¹⁷⁷ The NCP system established to ensure and promote implementation of the OECD Guidelines also enables petitioners to raise allegations of improper conduct by

176. The United Nations has been actively encouraging creation of these national human rights institutions for decades. See U.N. Centre for Human Rights, *National Human Rights Institutions: A Handbook on the Establishment and Strengthening of National Institutions for the Promotion and Protection of Human Rights*, Professional Training Series No. 4 at 4-6, U.N. Doc. HR/P/PT/4 (1995) [hereinafter *NHRI Handbook*]; see also *supra* note 137 (referring to the "Paris Principles," guidelines for establishment and operation of NHRIs). NHRIs have been defined as bodies "established by a Government under the constitution, or by law or decree, the functions of which are specifically defined in terms of the promotion and protection of human rights." *NHRI Handbook, supra*, ¶ 39; see also Linda C. Reif, *Building Democratic Institutions: The Role of National Human Rights Institutions in Good Governance and Human Rights Protection*, 13 HARV. HUM. RTS. J. 1 (2000) (discussing the history, structures, powers, and effectiveness of NHRIs). More than 100 of these institutions have now been created throughout the world. National Human Rights Institutions Forum, National Human Rights Institutions, <http://www.nhri.net/NationalData.asp?ID=107> (last visited May 1, 2010) (containing database of NHRIs around the world). In Latin America alone, countries that have established NHRIs include Mexico, Costa Rica, Guatemala, El Salvador, Honduras, Argentina, Peru, Ecuador, Bolivia, and Columbia. Reif, *supra* note 176, at 51.

177. See *supra* Part III.C (discussing those mechanisms in the ADB and World Bank); see also CAROLINE REES & DAVID VERMIJS, MAPPING GRIEVANCE MECHANISMS IN THE BUSINESS AND HUMAN RIGHTS ARENA 71-91, 103-08 (2008) (discussing the compliance mechanisms of the African Development Bank, ADB, European Bank for Reconstruction and Development, Inter-American Development Bank, and World Bank). Many of these mechanisms do not provide for analysis of the institutions' and/or their contractors' compliance with human rights or environmental standards *per se*, but instead examine whether the institutions complied with their own policies and procedures. *Id.* While they represent progress in ensuring international financial institutions respect human rights and environmental standards, these internal mechanisms are nevertheless subject to criticism on the ground that they do not sufficiently "narrow[] the accountability gap" left by application of national and international laws to multinational entities. See, e.g., Nathalie L. Bridgeman & David B. Hunter, *Narrowing the Accountability Gap: Toward a New Foreign Investor Accountability Mechanism*, 20 GEO. INT'L ENVTL. L. REV. 187 (2008) (analyzing and critiquing the accountability mechanisms of institutions such as the International Finance Corporation, World Bank, and OECD, and proposing an alternative mechanism).

any MNE operating from or within the territory of any OECD country.¹⁷⁸ Finally, though not discussed above in the context of the WSHP, additional strategies that advocates may employ to prevent and remedy human rights violations resulting from inadequate consideration of climate change-related considerations include bringing claims for declaratory or other relief from international human rights bodies such as the United Nations Human Rights Committee under the Optional Protocol to the ICCPR,¹⁷⁹ the Inter-American Commission of Human Rights,¹⁸⁰ and the European Court of Human Rights.¹⁸¹

VII. CONCLUSION

The challenges posed by climate change require that countries examine their development strategies to ensure that their planned projects are resilient to the impacts of climate change, do not unnecessarily exacerbate the climate change challenge, and maximize countries' competitive advantages in an era in which the presence of GHG sinks and low national emissions are exploitable assets. Due diligence is necessary to

178. *See supra* notes 160-63.

179. Optional Protocol to the International Covenant on Civil and Political Rights art. 1, Dec. 16, 1966, 999 U.N.T.S. 302 ("A State Party to the Covenant that becomes a Party to the present Protocol recognizes the competence of the Committee to receive and consider communications from individuals subject to its jurisdiction who claim to be victims of a violation by that State Party of any of the rights set forth in the Covenant.").

180. The members of the Organization of American States (OAS) created the Inter-American Commission (Commission) in 1959 to help promote human rights in the region. *See* Inter-American Commission on Human Rights, What is the IACHR?, <http://www.cidh.oas.org/what.htm> (last visited Apr. 25, 2010) (in 1965, the OAS authorized the Commission to examine petitions and complaints alleging violations of human rights by OAS member states). *See also* American Convention on Human Rights arts. 41-51 O.A.S. Treaty Series No. 36, 1144 U.N.T.S. 123, entered into force 18 July 1978 (describing the functions, competence and powers of the Commission). Among its remedial powers, the Commission may recommend member states take measures to protect human rights or prevent violations. *Id.* It can also submit cases to the Inter-American Court of Human Rights. *Id.* arts. 48-64.

181. *See* European Convention for the Protection of Human Rights and Fundamental Freedoms art. 34, adopted Nov. 5, 1994, Europ. T.S. No. 155 ("The Court may receive applications from any person, non-governmental organization or group of individuals claiming to be the victim of a violation by one of the High Contracting Parties of the rights set forth in the Convention or the protocols thereto.").

ensure development activities properly consider impacts by and on climate change. The case of the WSHP illustrates the importance of these principles. Development of that hydropower project may be an important strategy for India and Nepal. Yet it should not be pursued as it has—without an adequate assessment of its costs and benefits, and at the expense of the rights of the Nepali people to information, social justice, and a clean environment. Advocates have and should thus use the various tools available to them to seek to cure those rights violations and hold the parties responsible, SMEC-WSHL, the GoN, and the ADB, to account.