FOREIGN AFFAIRS CANADA

Policy Position Paper

Topic: Geopolitics and Global Demographics

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***Issues Identified*:**

- Increasing population growth and changing demographics will place an ever-greater strain on energy and resource supplies.[1]
- Resources, water in particular, are unevenly distributed, especially in relation to economic activity and population concentrations.[2]

Potential Foreign Policy Concerns

- Extreme resource scarcity will lead to conflict.[3]
- Areas with greater scarcity—namely developing countries and net resource importers—are more likely to experience conflict.[4]

Our Response:

As states attempt to meet their ever increasing energy and resource needs, there will be increasing instability in the international system. However, this does not have to lead to violent conflict. If methods are found to decrease the rate of resource depletion, whether through increased efficiency of use or mechanisms for cooperation such as treaties, conflict can be avoided.[5] In the case of water, for example, studies have found that the existence of institutions, particularly water-specific institutions, reduces the risk of militarized conflict and increases the effectiveness of attempts to settle water disputes through peaceful means.[6] The International Joint Commission between the US and Canada is a good example.[7] In fact, the shared realization that all countries may ultimately lose from resource-inspired conflicts may encourage greater cooperation. Canada is currently in a strong position to assist the rest of the international community in modeling cooperative best practices and can play a significant leadership/mediation role in resource disagreements.

Policy Recommendations

Since Canada has some of the largest supplies of fresh water and oil, it will find itself at the forefront of the energy/resources debate. Policies need to address the growing need for energy and resources in all countries and not simply in areas of strategic

interest. Canada's approach needs to be proactive; we can play a useful role both as mediators and as originators of cooperative policy initiatives in:

- Multilateral agreements,
- Consumption regulations, and
- Research and development initiatives.[8]

Specific Proposed Initiatives

Perhaps the best avenue for preventing conflict is to increase the efficiency of resource use. Canada can play an important role in negotiating multilateral agreements dealing with the management of resources, including both the use/consumption and the conservation of resources. Since such agreements would be of little use without an appropriate enforcement mechanism, Canada should seek cooperation within the UN to establish the use of binding international arbitration procedures.

Moreover, Canada should promote the creation of specific institutions, perhaps under the UN umbrella, that would deal with important resource treaties. Such institutions could serve both as enforcement bodies and as educational bodies to help countries implement more efficient methods of use. Further, these organizations should include input from non-governmental organizations, local indigenous groups and transnational corporations.

Our relations with the US are a particular area of concern. The relations are characterized by cooperation and an equitable sharing arrangement. Due to the level of water usage in the US, however, Canada must strongly enforce the idea that water use management needs to be more efficient since over usage overburdens the Canadian watersheds.[9] Moreover, the Agreement on Environmental Cooperation (NAAEC)[10] currently has no binding powers.[11] Canada should seek agreement with the other signatories of NAFTA to strengthen this agreement in line with other enforceable mechanisms within the broader trading regime.

Regarding oil, Canada should strive to abide by the conditions of the Kyoto Agreement. Agreements could also be sought with transnational corporations (TNCs); for example, agreements could be signed with individual companies based on the products they produce—namely, the Canadian government should ration access to oil, based on the nature of the products produced through the use of oil. Such efforts could stimulate research in all sectors and create greater market competition and decrease extreme scarcity in states that are dependent on Canada for resources, thus decreasing potential for confrontation.[12]

Finally, Canada must invest in its own research and development initiatives, while encouraging the sharing of efficiency advances among all countries.[13] Canada should aggressively pursue research and development in the areas of oil and water in a way that leverages our resource abundance to create more efficient use of technology globally. Research into energy and water efficiency would decrease current consumption, thus increasing the amount of resources available for export. In the long

term, however, this would not decrease global confrontation due to scarcity. Consequently, Canada should mobilize the efforts of partner nations with stronger research capabilities to develop new methods for increasing efficiency of use, thus decreasing the level of global demand for resources.

Conclusion

Given our vast supply of oil and water resources, Canada is, and in the future will continue to be, in a position to play a leadership role in dealing with resource scarcity. Understanding that resources such as oil and water will become increasingly scarce in other regions, and understanding that the need to secure energy supplies will become competitive as a result, Canada has a role and a responsibility through our commitment to multilateral and peace-oriented resolutions to provide mechanisms for cooperation. Learning from already implemented agreements such as the Joint Water Commission between the US and Canada, we should advocate for efficient use of these resources and for the creation of new institutions to deal with these resources, while proactively resolving potential crises through institutions that are already in place.

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[1] "Both developed and developing economies need a stable supply of energy and cannot tolerate the slightest interruptions or shortfall. The explosion of economic growth in developing economies—particularly in Asia—has created an explosion in demand for electricity, an energy product critical to growth and modernization." D. O'Brien (1997) "Mightier than the Sword," *Harvard International Review*, 19(3): 8-14, 13.

[2] Jeffrey Kluger and Andrea Dorfman, "The Challenges We Face," *Time*, 2 August 2002.

[3] Thomas F. Homer-Dixon, "Violent conflict, Environmental Scarcity and Long-term Security Implications," in *The Puzzles of Power: An Introduction to Political Science 2nd ed.*, Michael Howlett and David Laycock (eds), 223-234. Toronto: Oxford University Press, 1998.

[4] Possible ripple effects on Canada would include: increased immigration, refugees, conflict carriage from homelands, increased terrorism, shrinking trading bases, instability of the international system, increased humanitarian aid costs, increased peace-keeping costs, etc.

[5] Indeed, attempts to minimize resource crises through the development of alternatives must occur to avoid the collapse of cooperation efforts that can be "highly sensitive to small changes in initial conditions". G.A. Daneke (2001) "Sustainable Development as Systematic Choices," *Policy Studies Journal*, 29(3): 514-532, 524.

[6] Paul R. Hensel, Sara McLaughlin, Thomas Mitchell, and E. Sowers II, "Conflict Management of Riparian Disputes," *Political Geography* (Nov 2005), 24.

[7] Ibid, p. 7.

[8] This is supported by Solomon who states, "We all have to start thinking more seriously about reinventing our energy future…we need to step back and ask one simple question: is there a better way to fuel or future?" E. Solomon (2003) "Fuel for Thought", *Maclean's*, 116, January: 46-47.

[9] As such, minimum requirements of water outflow from Canada to the United States and from the United States to Mexico should be set. Failure to achieve a target on one border will result in the burden of penalties resting with the immediate upstream state, while failure on both borders will result in equal sharing of the penalties based on the percentage of targets that are not fulfilled. Penalties can be waved in cases of extreme water shortage.

[10] The Agreement on Environmental Cooperation was a side agreement to NAFTA.

[11] Steven Berstein and Cashore Benjamin, "Globalization, Internationalization, and Liberal Environmentalism: Exploring Non-Domestic Sources of Influence on Canadian Environmental Policy," in *Canadian Environmental Policy*, Debora L. Van Nijnatten and Robert Boardman (eds), New York: Oxford University Press, 2002, 215.

12Regarding oil, Canada should abide by the conditions of Kyoto. Agreements could also be sought with transnational corporations (TNCs); for example, agreements could be signed with individual companies based on the products they produce. The Canadian government should give a larger quota of barrels extracted, based on the evidence that TNCs are either investing in alternative energy technology R&D or proof that vertically integrated TNCs are not producing oil based products that are consumer products with one life-cycle. The market incentive (an additional quota of oil) could stimulate research in all sectors and create greater market competition with the side effect of providing technological alternatives that will decrease extreme scarcity in states that are dependent on Canada for resources, thus decreasing potential for confrontation

13 For example, Canada should increase funding for water recycling and drip irrigation projects in agricultural zones globally.

Bibliography

Berstein, S. and Benjamin, C. "Globalization, Internationalization, and Liberal Environmentalism: Exploring Non-Domestic Sources of Influence on Canadian Environmental Policy," in *Canadian Environmental Policy*, D. L. Van Nijnatten and R. Boardman (eds), New York: Oxford University Press, 2002.

Daneke, G.A. (2001) "Sustainable Development as Systematic Choices," *Policy Studies Journal*, 29(3): 514-532, 524.
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Hensel, P.R., McLaughlin, S., Mitchell,T. & Sowers, E. II, "Conflict Management of Riparian Disputes," *Political Geography* (Nov 2005)

Homer-Dixon, T.F. "Violent conflict, Environmental Scarcity and Long-term Security Implications," in *The Puzzles of Power: An Introduction to Political Science 2nd ed.*, M. Howlett and D.Laycock (eds), 223-234. Toronto: Oxford University Press, 1998.

O'Brien, D. (1997) "Mightier than the Sword," *Harvard International Review*, 19(3): 8-14, 13.
Jeffrey Kluger and Andrea Dorfman, "The Challenges We Face," *Time*, 2 August 2002.

Solomon, E. (2003) "Fuel for Thought", *Maclean's*, 116, January: 46-47.