

hot topic

Climate Change and Social Justice



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Increasing global temperatures will have negative impacts on people in Manitoba and internationally. Climate change will compromise the homes, health, food, and water security for many people (see examples on the other side of this pamphlet). Such negative impacts may disrupt social and cultural norms of existing communities and will likely impose large financial burdens.

With limited resources to adapt or relocate, the world's poor are especially vulnerable to the impacts of climate change despite having contributed the least to greenhouse gas emissions.

"The carbon footprint of the earth's poorest 1 billion is around 3 percent of the world's total carbon footprint."

UNDP Human Development Report 2007/2008, page 43

Climate change may also cause increased instability and conflict around the world. As climate change impacts livelihoods worldwide, numerous people will require aid and/or be forced to move. Such climate refugees will require aid and seek homes in less impacted regions and nations.

Consequently, reducing greenhouse gas emissions is necessary to help the world's less fortunate from unfairly slipping deeper into poverty and to better ensure global peace and prosperity.



Social Impacts of Climate Change in Manitoba and Around the World



- 1 Winter road access in northern Manitoba was reduced from 50-55 days to a low of 20 days in the winter of 2000.¹ When transport via land is not possible, essential supplies must be flown in to northern communities at greater expense.
- 2 Over the next century, U.S. crop yields could decrease by 30 to 46 percent if global warming occurs slowly and by 63 to 82 percent if global warming occurs rapidly.²
- 3 In a few decades, Andean inter-tropical glaciers will likely disappear affecting water availability and hydropower generation for millions of people living on and around the Andes Mountains.³
- 4 The intensity and frequency of summer heatwaves will increase throughout Europe.⁴ Extreme heat in Europe during the summer of 2003 led to more than 35,000 deaths.⁵
- 5 As temperatures continue to rise and rainfall becomes more erratic in Africa, approximately 75-250 million people will be at risk of increased water stress by the 2020s - this number will likely escalate to 350-600 million people by the 2050s.⁶
- 6 Glaciers in the Greater Himalayas are shrinking rapidly. These glaciers supply water for the 10 largest rivers in Asia and nearly 1/3rd of the world's population.⁷
- 7 A 1m rise of ocean levels would displace 20 million people in Bangladesh.⁸
- 8 By 2050, there will be an additional 3,200 to 5,200 heat-related deaths per year, and 0.6 to 1.4 million more people exposed to dengue fever in Australia and New Zealand.⁹

REFERENCES:

¹ D. Runnals 2007. Climate Change Impacts in Manitoba. International Institute for Sustainable Development; Winnipeg, MB. Available online: http://www.iisd.org/pdf/2007/com_climate_impacts_mb.pdf

² W. Schlenker and M.J. Roberts, 2009. Nonlinear temperature effects indicate severe damages for US crop yields under climate change. Proc. Nat. Acad. of Sci. doi: 10.1073/pnas.0906865106.

³ Magrin, G., C. Gay García, D. Cruz Choque, J.C. Giménez, A.R. Moreno, G.J. Nagy, C. Nobre and A. Villamizar, 2007: Latin America. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 581-615.

⁴ Alcamo, J., J.M. Moreno, B. Nováky, M. Bindi, R. Corobov, R.J.N. Devoy, C. Giannakopoulos, E. Martin, J.E. Olesen, A. Shvidenko, 2007: Europe. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 541-580.

⁵ A. McMichael, R. Woodruff, and S. Hales, 2006. Climate change and human health: present and future risks. The Lancet, 367: 859-869.

⁶ M. Boko, I. Niang, A. Nyong, C. Vogel, A. Githeko, M. Medany, B. Osman-Elasha, R. Tabo and P. Yanda, 2007: Africa. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge UK, 433-467.

⁷ J. Xu, E.R. Grumbine, A. Shrestha, M. Eiríksson, X. Yang, Y. Wang, A. Wilkes. 2009. The Melting Himalayas: Cascading Effects of Climate Change on Water, Biodiversity, and Livelihoods. Conservation Biology 23: 520-530.

⁸ M. Inman. 2009. Where warming hits hard. Nature Reports Climate Change. Available online: <http://dx.doi.org/10.1038/climate.2009.3>

⁹ Hennessy, K., B. Fitzharris, B.C. Bates, N. Harvey, S.M. Howden, L. Hughes, J. Salinger and R. Warrick, 2007: Australia and New Zealand. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 507-540.