Bibliography & Interview List

FLOODING CRISIS IN CANADA

BO SIMANGO & ALI ALFOSOOL MEMORIAL UNIVERSITY

MAP THE SYSTEM 2020

BIBLIOGRAPHY

- 1. Svetlana D, Radovan D, Ján D. The Economic Impact of Floods and their Importance in Different Regions of the World with Emphasis on Europe. *Procedia Econ Financ*. 2015;34(15):649-655. doi:10.1016/s2212-5671(15)01681-0
- 2. Ibarrarán ME, Ruth M, Ahmad S, London M. Climate change and natural disasters: Macroeconomic performance and distributional impacts. *Environ Dev Sustain*. 2009;11(3):549-569. doi:10.1007/s10668-007-9129-9
- 3. National Working Group on Financial Risk of Flooding. Options for Managing Flood Costs of Canada's Highest Risk Residential Properties. *Insur Bur Canada*. 2019;(June).
- 4. Public Safety Canada. *Emergency Management Strategy for Canada: Toward a Resilient 2030.*; 2019. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/mrgncy-mngmnt-strtgy/index-en.aspx.
- 5. Bush E, Lemmen DS, Editors. *Canada's Changing Climate Report; Government of Canada.*; 2019. http://www.changingclimate.ca/CCCR2019.
- 6. Feltmate B, Moudrak M. Climate change and the preparedness of Canadian provinces and Yukon to limit potential flood damage. 2016:116. http://www.intactcentreclimateadaptation.ca/wp-content/uploads/2016/10/Intact-Centre-Climate-Change-and-the-Preparedness-of-Canadian-Provinces-and-Yukon-Oct-2016.pdf.
- 7. Road THE, Becoming TO, For ATS, Information P. FLOOD RISK REDUCTION IN CANADA: THE ROAD TO BECOMING A TRUSTED SOURCE FOR PREPAREDNESS INFORMATION. 2018;(September).
- 8. Dutta A. Business Planning for Network Services: A Systems Thinking Approach. *Inf Syst Res.* 2001;12(3):260-283. doi:10.1287/isre.12.3.260.9713
- 9. Cavallo A, Ireland V. Preparing for complex interdependent risks: A System of Systems approach to building disaster resilience. *Int J Disaster Risk Reduct*. 2014;9:181-193. doi:10.1016/j.ijdrr.2014.05.001
- 10. Davidson KM, Venning J. Sustainability decision-making frameworks and the application of systems thinking: An urban context. *Local Environ*. 2011;16(3):213-228. doi:10.1080/13549839.2011.565464
- 11. Arnold RD, Wade JP. A definition of systems thinking: A systems approach. *Procedia Comput Sci.* 2015;44(C):669-678. doi:10.1016/j.procs.2015.03.050
- 12. IBC. IBC's Position on Flooding and Financial Security Recommendations to Government to Deliver a National Action Plan on Flooding. 2019;(January).
- 13. Canada IB of. Combatting Canada's Rising Flood Costs: 2018.
- 14. Government of Canada. Estimate of the Average Annual Cost for Disaster Financial

- Assistance Arrangements due to Weather Events. 2016; (February). www.pbo-dpb.gc.ca.
- 15. Insurance Bureau of Canada. A Primer on Severe Weather and Overland Flood Insurance in Canada. 2019.
- 16. Wake B. Flooding costs. *Nat Clim Chang*. 2013;3(9):778. doi:10.1038/nclimate1997
- 17. Andersen TK, Marshall Shepherd J. Floods in a changing climate. *Geogr Compass*. 2013;7(2):95-115. doi:10.1111/gec3.12025
- 18. Schnebele E, Cervone G, Kumar S, Waters N. Real time estimation of the calgary floods using limited remote sensing data. *Water (Switzerland)*. 2014;6(2):381-398. doi:10.3390/w6020381
- 19. Public Safety Canada. 2016-2017 Evaluation of the Disaster Financial Assistance Arrangements. 2017:1-20. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/vltn-dsstr-fnncl-ssstnc-2016-17/index-en.aspx#s41.
- 20. Bonsal BR, Peters DL, Seglenieks F, Rivera A, Berg A. Changes in freshwater availability across Canada. *Canada's Chang Clim Rep.* 2019:261-342. www.ChangingClimate.ca/CCCR2019.
- 21. Tarnocai C, Adams GD, Glooschenko V, et al. *The Canadian Wetland Classification System*.; 1988.
- 22. Price JS, Branfireun BA, Waddington JM, Devito KJ. Advances in Canadian wetland hydrology, 1999-2003. *Hydrol Process*. 2005;19(1):201-214. doi:10.1002/hyp.5774
- 23. Woo MK, Marsh P. Snow, frozen soils and permafrost hydrology in Canada, 1999-2002. *Hydrol Process.* 2005;19(1):215-229. doi:10.1002/hyp.5772
- 24. Gugten N van der. Hydrology of floods in Canada a guide to planning and design. *Can J Civ Eng.* 1992;19(3):543-544. doi:10.1139/l92-064
- 25. van Aalst MK. The impacts of climate change on the risk of natural disasters. *Disasters*. 2006;30(1):5-18. doi:10.1111/j.1467-9523.2006.00303.x
- 26. Bruce M C, James H, Janie R, Clare M S, Stephen T, Eva (Lini) Wollenberg. Urgent action to combat climate change and its impacts (SDG 13): transforming agriculture and food systems. *Curr Opin Environ Sustain*. 2018;34(Sdg 13):13-20. doi:10.1016/j.cosust.2018.06.005
- 27. Kaewkitipong L, Chen C, Ractham P. Lessons learned from the use of social media in combating a crisis: A case study of 2011 Thailand flooding disaster. *Int Conf Inf Syst ICIS* 2012. 2012;1:766-782.
- 28. Mwale FD, Adeloye AJ, Beevers L. Quantifying vulnerability of rural communities to flooding in SSA: A contemporary disaster management perspective applied to the Lower Shire Valley, Malawi. *Int J Disaster Risk Reduct*. 2015;12:172-187. doi:10.1016/j.ijdrr.2015.01.003

- 29. Price RK, Vojinovic Z. Urban food disaster management. *Urban Water J.* 2008;5(3):259-276. doi:10.1080/15730620802099721
- 30. Tingsanchali T. Urban flood disaster management. *Procedia Eng.* 2012;32:25-37. doi:10.1016/j.proeng.2012.01.1233
- 31. Hwacha V. Canada's experience in developing a national disaster mitigation strategy: A deliberative dialogue approach. *Mitig Nat Hazards Disasters Int Perspect*. 2005:175-191. doi:10.1007/1-4020-4514-X 9
- 32. Atteridge A. Finance for the adaptation of ecosystems to climate change : a review of the Adaptation Fund portfolio. 2019;(April).
- 33. Rochette A. Climate Change is a Social Justice Issue: The Need for a Gender-Based Analysis of Mitigation and Adaptation Policies in Canada and Québec. *J Environ Law Pract*. 2016;29:383-410.
- 34. McNeil D. An Independent Review of the 2019 Flood Events in Ontario. 2019.
- 35. Forani J. CTV News Special: Lisa LaFlamme leads coverage of PM Trudeau's daily Flood insurance difficult to obtain for homeowners at repeated risk. 2020.
- 36. Fisher K, Geenen J, Jurcevic M, McClintock K, Davis G. Applying asset-based community development as a strategy for CSR: a Canadian perspective on a win-win for stakeholders and SMEs. *Bus Ethics A Eur Rev.* 2009;18(1):66-82. doi:10.1111/j.1467-8608.2009.01549.x
- 37. Boyd CP, Hayes L, Wilson RL, Bearsley-Smith C. Harnessing the social capital of rural communities for youth mental health: An asset-based community development framework. *Aust J Rural Health*. 2008;16(4):189-193. doi:10.1111/j.1440-1584.2008.00996.x
- 38. Mathie A, Cunningham G. Who is driving development? Reflections on the transformative potential of asset-based community development. *Can J Dev Stud*. 2005;26(1):175-186. doi:10.1080/02255189.2005.9669031
- 39. Mathie A, Cunningham G. From clients to citizens: Asset-based Community Development as a strategy for community-driven development. *Dev Pract*. 2003;13(5):474-486. doi:10.1080/0961452032000125857
- 40. Cunningham G, Mathie A. Asset-Based Community Development -- An Overview What Is ABCD ? *Synerg Knowl*. 2002:1-5.
- 41. Chirisa I. Prospects for the asset-based community development approach in Epworth and Ruwa, Zimbabwe: A housing and environmental perspective. *African J Hist Cult*. 2009;1(2):28-35.
- 42. Rubin O, Rossing T. National and local vulnerability to climate-related disasters in Latin America: The role of social asset-based adaptation. *Bull Lat Am Res.* 2012;31(1):19-35. doi:10.1111/j.1470-9856.2011.00607.x

- 43. Kretzmunn J, Mcknight J. Assets-Based Community Development.
- 44. Reynaud A, Aubert C, Nguyen MH. Living with floods: Protective behaviours and risk perception of vietnamese households. *Geneva Pap Risk Insur Issues Pract*. 2013;38(3):547-579. doi:10.1057/gpp.2013.16
- 45. Becker JS, Taylor HL, Doody BJ, Wright KC, Gruntfest E, Webber D. A review of people's behavior in and around floodwater. *Weather Clim Soc.* 2015;7(4):321-332. doi:10.1175/WCAS-D-14-00030.1
- 46. Scott H, Smith B, Schaedler B. Disaster recovery towards resilience: contributions of an assets-based community development approach. *Aust J Emerg Manag*. 2018;33(1):55-60. https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=127713205&site=eh ost-live.
- 47. Burn DH, Whitfield PH. Changes in floods and flood regimes in Canada. *Can Water Resour J.* 2016;41(1-2):139-150. doi:10.1080/07011784.2015.1026844
- 48. Adda P, Mioc D, Anton F, McGillivray E, Morton A, Fraser D. 3D flood-risk models of government infrastructure. *Int Arch Photogramm Remote Sens Spat Inf Sci ISPRS Arch*. 2010;38(4W13).
- 49. Murdock HJ, de Bruijn KM, Gersonius B. Assessment of critical infrastructure resilience to flooding using a response curve approach. *Sustain*. 2018;10(10). doi:10.3390/su10103470
- 50. Nirupama N, Armenakis C, Montpetit M. Is flooding in Toronto a concern? *Nat Hazards*. 2014;72(2):1259-1264. doi:10.1007/s11069-014-1054-2
- 51. Oulahen G. Flood Insurance in Canada: Implications for Flood Management and Residential Vulnerability to Flood Hazards. *Environ Manage*. 2015;55(3):603-615. doi:10.1007/s00267-014-0416-6
- 52. Qiu J. Journal of Intelligent Material Systems and Structures: Preface. *J Intell Mater Syst Struct*. 2006;17(8-9):651. doi:10.1177/1045389X06069542
- 53. Ansari F. Practical implementation of optical fiber sensors in civil structural health monitoring. *J Intell Mater Syst Struct*. 2007;18(8):879-889. doi:10.1177/1045389X06075760
- 54. Nagayama T, Spencer JF, Fujino Y. Structural health monitoring using smart sensors. *EASEC-11 - Elev East Asia-Pacific Conf Struct Eng Constr.* 2008;(November). doi:10.1201/9781439828441.ch129
- 55. Lynch JP. A Summary Review of Wireless Sensors and Sensor Networks for Structural Health Monitoring. *Shock Vib Dig.* 2006;38(2):91-128. doi:10.1177/0583102406061499
- 56. Cutter SL, Burton CG, Emrich CT. Disaster Resilience Indicators for Benchmarking Baseline Conditions. *J Homel Secur Emerg Manag*. 2010;7(1). doi:10.2202/1547-7355.1732

- 57. Cavallo A. Complex Systems Thinking: An Integral Feature of Disaster Preparedness for Global Risk Forum in cooperation with the United Nations Office for Disaster Risk Reduction (UNISDR) International Disaster and Risk Conference IDRC 2014 Davos, Switzerland 24-. 2014;(July).
- 58. Wilmot CG, Mei B. Crisis Response and Disaster Resilience 2030: Forging Strategic Action in an Age of Uncertainty. *Nat Hazards Rev.* 2004;5(4):170-178. doi:10.1061/(ASCE)1527-6988(2004)5:4(170)
- 59. Scanlon J. Lessons Learned or Lessons Forgotten: The Canadian Disaster Experience (Paper 1). *Institue Catastrophic Loss Reduct*. 2001:1-15.
- 60. Consultations P. Canadian Home Builders 'Association. 2019.
- 61. Li J, Landry CE. Flood risk, local hazard mitigation, and the community rating system of the national flood insurance program. *Land Econ*. 2018;94(2):175-198. doi:10.3368/le.94.2.175
- 62. McDonnell AB. The Biggert-Waters Flood Insurance Reform Act of 2012: Temporarily Curtailed by the Homeowner Flood Insurance Act of 2014 A Respite to Forge an Enduring Correction to the National Flood Insurance Program Built on Virtuous Economic and Environmental Ince. Wash UJ L Pol'y. 2015;49(235).
- 63. Rosenbaum W. The Developmental and Environmental Impacts of the National Flood Insurance Program: A Review of Literature. 2005;(April).
- 64. Brannon I, Blask A. PolicyAnalysis. 2017;(817).
- 65. Report I. Standards to Support Climate Resilience in Infrastructure: Taking stock and mapping the future. 2019.
- 66. UNEP. Climate Change Adaptation Technologies for Water. 2017.
- 67. Financial Management of Flood Risks. *Water Intell Online*. 2016;15(0):9781780408576-9781780408576. doi:10.2166/9781780408576
- 68. Steinberg PF. Institutional resilience amid political change: The case of biodiversity conservation. *Glob Environ Polit*. 2009;9(3):61-81. doi:10.1162/glep.2009.9.3.61
- 69. Hills A. Revisiting institutional resilience as a tool in crisis management. *J Contingencies Cris Manag.* 2000;8(2):109-118. doi:10.1111/1468-5973.00130
- 70. de Stefano L, Duncan J, Dinar S, Stahl K, Strzepek KM, Wolf AT. Climate change and the institutional resilience of international river basins. *J Peace Res.* 2012;49(1):193-209. doi:10.1177/0022343311427416
- 71. Almedom AM, Tumwine JK. Resilience to disasters: a paradigm shift from vulnerability to strength. *Afr Health Sci*. 2008;8 Suppl 1:1-4.
- 72. Razafindrabe BHN, Parvin GA, Surjan A, Takeuchi Y, Shaw R. Climate Disaster Resilience: Focus on Coastal Urban Cities in Asia. *Asian J Environ Disaster Manag Focus Pro-active*

- Risk Reduct Asia. 2009;01(01):101. doi:10.3850/s179392402009000088
- 73. Westley F. Renewal and resilience: the role of social innovation in building institutional resilience. *Afr Health Sci.* 2008;8 Suppl 1:2008. doi:10.4314/ahs.v8i3.7095
- 74. Działek J, Biernacki W, Bokwa A. Challenges to social capacity building in flood-affected areas of southern Poland. *Nat Hazards Earth Syst Sci.* 2013;13(10):2555-2566. doi:10.5194/nhess-13-2555-2013
- 75. Buckland J, Rahman M. Community-based disaster management during the 1997 Red River Flood in Canada. *Disasters*. 1999;23(2):174-191. doi:10.1111/1467-7717.00112
- 76. Knapp M, Bauer A, Perkins M, Snell T. Building community capital in social care: Is there an economic case? *Community Dev J.* 2013;48(2):313-331. doi:10.1093/cdj/bss021
- 77. Hancock T. People, partnerships and human progress: Building community capital. *Health Promot Int*. 2001;16(3):275-280. doi:10.1093/heapro/16.3.275
- 78. Callaghan EG, Colton J. Building sustainable & resilient communities: A balancing of community capital. *Environ Dev Sustain*. 2008;10(6):931-942. doi:10.1007/s10668-007-9093-4
- 79. McEwen L, Holmes A, Quinn N, Cobbing P. 'Learning for resilience': Developing community capital through flood action groups in urban flood risk settings with lower social capital. *Int J Disaster Risk Reduct*. 2018;27(October 2017):329-342. doi:10.1016/j.ijdrr.2017.10.018
- 80. UNISDR. Guidelines for Reducing Flood Losses. *United Nations Hqrs (UN), available online https://www.unisdr.org/we/inform/publications/558.* 2002:79.
- 81. UNISDR, WMO. Disaster risk and resilience: Thematic think piece. 2012;(May):1-13.
- 82. Summary E, Agreement TP. LOG17-007: Communication from the United Nations Office of Legal Affairs. 2015;4(2014):1-11. doi:10.1017/CBO9781107415324.See
- 83. United Nations S-G. Report of the secretary-general on the 2019 climate action summit and the way forward in 2020. *United Nations*. 2019;(December 2019).
- 84. United Nations. Climate Action Summit 2019 Summit delivers major step up in national ambition and private sector action on pathway to key 2020 climate deadline. *United Nations*. 2019.
- 85. Pdap W. Overland Flood Insurance in Saskatchewan.
- 86. Kousky C, Lingle B. Residential Flood Insurance in Puerto Rico. 2018:1-5.
- 87. Cavenett. 済無No Title No Title. *J Chem Inf Model*. 2013;53(9):1689-1699. doi:10.1017/CBO9781107415324.004
- 88. Sandink D, Kovacs P, Oulahen G, McGillivray G. Making Flood Insurable for Canadian Homeowners. *Swiss Re*. 2010;(November).

Interviews

Interviewee 0001. Dr. Andrew Furey, CEO Broken Earth. Interviewed by Bo Simango, July 12, 2019 Interviewee 0002. Curran McConnell, Canadian Armed Forces Reservist. Interviewed by Bo Simango, November 28, 2019

Interviewee 0003. Donna Dupont at Purple Compass. Interviewed by Bo Simango, December 13, 2019 Interviewee 0004. SB Crisis Management Consulting representative. Interviewed by Bo Simango, December 13, 2019

Interviewee 0005. Disaster Planner & Recovery Specialist 1, Emergency Management Ontario. Interviewed by Bo Simango, June 13, 2019

Interviewee 0006. Disaster Planner & Recovery Specialist 2, Emergency Management Ontario. Interviewed by Bo Simango, June 13, 2019

Interviewee 0007. Disaster Planner & Recovery Specialist 3, Emergency Management Ontario. Interviewed by Bo Simango, June 18, 2019

Interviewee 0008. Disaster Planner & Recovery Specialist 4, Emergency Management Ontario. Interviewed by Bo Simango, June 18, 2019

Interviewee 0009. Disaster Planner & Recovery Specialist 5, Emergency Management Ontario. Interviewed by Bo Simango, June 19, 2019

Interviewee 0010. Disaster Planner & Recovery Specialist 6, Emergency Management Ontario. Interviewed by Bo Simango, June 19, 2019

Interviewee 0011. Emergency Management British Columbia representative. Interviewed by Bo Simango, September 10, 2019

Interviewee 00012. Young Leader for the Sustainable Development Goals representative. Interviewed by Bo Simango, September 12, 2019

Interviewee 00013. Disaster Risk Management Specialist representative, The World Bank. Interviewed by Bo Simango, September 12, 2019

Interviewee 00014. Disaster Planner & Recovery Specialist 1, Canadian Red Cross representative. Interviewed by Bo Simango, September 13, 2019

Interviewee 00015. Disaster Planner & Recovery Specialist 2, Canadian Red Cross representative. Interviewed by Bo Simango, September 13, 2019

Interviewee 00016. Disaster Planner & Recovery Specialist 3, Canadian Red Cross representative. Interviewed by Bo Simango, September 14, 2019

Interviewee 00017. Disaster Planner & Recovery Specialist 4, Canadian Red Cross representative. Interviewed by Bo Simango, September 15, 2019

Interviewee 00018. Disaster Planner & Recovery Specialist 5, Canadian Red Cross representative. Interviewed by Bo Simango, October 8, 2019

Interviewee 00019. Disaster Planner & Recovery Specialist 6, Canadian Red Cross representative. Interviewed by Bo Simango, October 10, 2019

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Interviewee 00021. Disaster Planner & Recovery Specialist 8, Canadian Red Cross representative. Interviewed by Bo Simango, November 13, 2019

Interviewee 00022. Relief Advisory International representative 1. Interviewed by Bo Simango, January 21, 2020

Interviewee 00023. Relief Advisory International representative 2. Interviewed by Bo Simango, January 21, 2020

Interviewee 00024. Canadian Disaster Relief Manager, Samaritan's Purse. Interviewed by Bo Simango, January 21, 2020

Interviewee 00025. Senior Manager, Operations, Relief & Recovery, Canadian Red Cross. Interviewed by Bo Simango, January 23, 2020

Interviewee 00026. Technical Program Manager 1, Disaster Relief by Amazon. Interviewed by Bo Simango, January 23, 2020

Interviewee 00027. Technical Program Specialist, Disaster Relief by Amazon. Interviewed by Bo Simango, January 28, 2020

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Interviewee 00029. Technical Program Manager 3, Disaster Relief by Amazon. Interviewed by Bo Simango, January 30, 2020

Interviewee 00030. International disaster Relief Manager, World Renew. Interviewed by Bo Simango, February 4, 2020

Interviewee 00031. Retired Military Officer 1, Canadian Armed Forces. Interviewed by Bo Simango, February 4, 2020

Interviewee 00032. Disaster Relief specialist 1, Texas Baptist Men Disaster Relief. Interviewe d by Bo Simango, February 13, 2020

Interviewee 00033. Disaster Relief specialist 2, Texas Baptist Men Disaster Relief. Interviewed by Bo Simango, February 13, 2020

Interviewee 00034. Retired Military Officer 2, Canadian Armed Forces. Interviewed by Bo Si mango, February 25, 2020

Interviewee 00035. Retired Military Officer 3, Canadian Armed Forces. Interviewed by Bo Simango, February 25, 2020

Interviewee 00036. Retired Military Officer 4, Canadian Armed Forces. Interviewed by Bo Simango, February 25, 2020

Interviewee 00037. Disaster Relief specialist 1, International Committee of the Red Cross. Interviewed by Bo Simango, March 3, 2020

Interviewee 00038. Disaster Relief specialist 2, International Committee of the Red Cross. Interviewed by Bo Simango, March 11, 2020

Interviewee 00039. Disaster Relief specialist 3, International Committee of the Red Cross. Interviewed by Bo Simango, March 13, 2020

Interviewee 00040. Disaster Relief specialist 4, International Committee of the Red Cross. Interviewed by Bo Simango, February 25, 2020