TEK and Climate Change: a bibliography

Prepared by Phurwa Gurung North Central Climate Adaptation Science Center, CU Boulder Summer 2021

1. Framing Traditional Ecological Knowledge

Agrawal, A. 1995. Dismantling the divide between indigenous and scientific knowledge. *Development and Change* 26 (3):413-439.

Berkes, F. 1999. Sacred Ecology: Traditional Ecological Knowledge and Resource Management.

Ingold, Tim. 2004. Two Reflections on Ecological Knowledge. In *Nature Knowledge: Ethnoscience, Cognition, and Utility*, edited by Glauco Sanga & Gherardo Ortalli. Berghahn Books. 301-311.

Simpson, L. 2004. Anticolonial Strategies for the Recovery and Maintenance of Indigenous Knowledge. *The American Indian Quarterly* 28 (3):373-384.

Whyte KP. 2018. What do indigenous knowledge do for indigenous peoples? In: Nelson ML, Shilling D (eds) *Traditional Ecological Knowledge: Learning from Indigenous Practices for Environmental Sustainability*. Cambridge University Press, 57-82.

Whyte, K.P. 2013. Justice Forward: Tribes, Climate Adaptation and Responsibility. *Climatic Change* 120 (3).

Yeh, Emily T. 2016. 'How Can Experience of Local Residents Be "Knowledge"?' Challenges in Interdisciplinary Climate Change Research. *Area* 48 (1): 34–40. <u>https://doi.org/10.1111/area.12189</u>.

2. "Braiding" knowledges

Alexander C, Bynum N, Johnson E, King U, Mustonen T, Neofotis P, Oettlé N et al. 2011. Linking indigenous and scientific knowledge of climate change. *BioScience* 61(6):477–484. <u>https://doi.org/10.1525/bio.2011.61.6.10</u>

Hatfield, Samantha Chisholm, Elizabeth Marino, Kyle Powys Whyte, Kathie D. Dello, and Philip W. Mote. 2018. Indian time: time, seasonality, and culture in Traditional Ecological Knowledge of climate change. *Ecological Processes* 7 (1): 1-11.

Barnhardt R, Kawagaley AO. 2005. Indigenous knowledge systems and Alaska Native ways of knowing. *Anthropol Educ Q* 36(1):8–23. <u>https://doi.org/10.1525/aeq.2005.36.1.008</u>

Bates P (2007) Inuit and scientific philosophies about planning, prediction, and uncertainty. *Arct Anthropol* 44(2): 87–100

Bennett TMB, Maynard NG, Cochran P, Gough R, Lynn K, Maldonado J, Voggesser G, Wotkyns S, Cozzetto K. 2014. Indigenous peoples, lands, and resources. In: Melillo JM, Richmond TC, Yohe WG (eds) *Climate change impacts in the United States: the third national climate assessment*. U.S. Global Change Research Program. <u>https://doi.org/10.7930/J09G5JR1</u>

Berkes F, Colding J, Folke C. 2000. Rediscovery of traditional ecological knowledge as adaptive management. *Ecol Appl* 10 (5):1251–1262. https://doi.org/10.1890/1051-0761(2000)010%5B1251:ROTEKA%5D2.0.CO;2

Bohensky, E.L. and Maru, Y., 2011. Indigenous knowledge, science, and resilience: What have we learned from a decade of international literature on "integration"? *Ecology and Society*, 16(4).

Burkett, M. 2013. Indigenous Environmental Knowledge and Climate Change Adaptation. In *Climate Change and Indigenous Peoples: The Search for Legal Remedies*, edited by Randall Abate and Elizabeth Kronk. Cheltenham, United Kingdom: Edward Elgar Publishing Limited.

Cameron ES. 2012. Securing indigenous politics: a critique of the vulnerability and adaptation approach to the human dimensions of climate change in the Canadian Arctic. Glob Environ Chang 22:103–114. <u>https://doi.org/10.1016/j.gloenvcha.2011.11.004</u>

Charnley S, Fischer AP, Jones ET. 2007. Integrating traditional and local ecological knowledge into forest biodiversity conservation in the Pacific Northwest. *Forest Ecol and Mgt* 246:14–28. <u>https://doi.org/10.1016/j.foreco.2007.03.047</u>

Drew JA. 2005. Use of traditional ecological knowledge in marine conservation. *Conserv Biol* 19:1286–1293.

Granderson, A.A., 2017. The role of traditional knowledge in building adaptive capacity for climate change: Perspectives from Vanuatu. *Weather, Climate, and Society*, *9*(3), pp.545-561.

Hopping, K.A., Chignell, S.M. and Lambin, E.F., 2018. The demise of caterpillar fungus in the Himalayan region due to climate change and overharvesting. *Proceedings of the National Academy of Sciences*, *115* (45), pp.11489-11494.

Cochran P, Huntington OH, Pungowiyi C, Tom S, Chapin FS III, Huntington HP, Maynard NG, Trainor SF. 2013. Indigenous frameworks for observing and responding to climate change in Alaska. *Clim Chang* 120:557–567. <u>https://doi.org/10.1007/s10584-013-0735-2</u>

Davidson-Hunt I, Berkes F. 2003. Learning as you journey: Anishinaabe perception of social-ecological environments and adaptive learning. *Ecol Soc* 8(1):5

Huntington HP. 2000. Using traditional ecological knowledge in science: methods and applications. *Ecol Appl* 10: 1270-1274. <u>https://doi.org/10.1890/1051</u>

Kimmerer, Robin Wall. 2013. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants*. First edition. Minneapolis, Minnesota: Milkweed Editions.

Lemi, T., 2019. The Role of Traditional Ecological Knowledge (TEK) for Climate Change Adaptation. *International Journal of Environmental Sciences & Natural Resources*, *18*(1): 28-31.

McGregor, D., 2005. Traditional ecological knowledge: An Anishnabe woman's perspective. *Atlantis: Critical Studies in Gender, Culture & Social Justice*, 29(2): 103-109.

Makondo, C.C. and Thomas, D.S., 2018. Climate change adaptation: Linking indigenous knowledge with western science for effective adaptation. *Environmental science & policy*, *88*: 83-91.

Martello, Marybeth Long. 2008. Arctic indigenous peoples as representations and representatives of climate change. *Social Studies of Science* 38 (3): 351-376.

Nakashima, D.J., K. Galloway McLean, H.D. Thulstrup, A. Ramos Castillo, and J.T. Rubis. 2012. *Weathering Uncertainty: Traditional Knowledge for Climate Change Assessment and Adaptation*. Paris, France: United Nations Educational, Scientific and Cultural Organization.

Nelson ML, Shilling D. eds. 2018. *Traditional Ecological Knowledge: Learning from Indigenous Practices for Environmental Sustainability*. Cambridge University Press.

Race, Digby, Supriya Mathew, Matthew Campbell, and Karl Hampton. 2016. Understanding climate adaptation investments for communities living in desert Australia: experiences of indigenous communities. *Climatic Change* 139 (3-4): 461-475.

Reidlinger, D., and F. Berkes. 2001. Contributions of traditional knowledge to understanding climate change in the Canadian Arctic. *Polar Record*: 315-328.

Reid, Michael G., Colleen Hamilton, Sarah K. Reid, William Trousdale, Cam Hill, Nancy Turner, Chris R. Picard, Cassandra Lamontagne, and H. Damon Matthews. 2014. Indigenous climate change adaptation planning using a values-focused approach: a case study with the Gitga'at nation. *Journal of Ethnobiology* 34 (3): 401-424.

Reo, N., and Whyte, K.P. 2012. Hunting and Morality as Elements of Traditional Ecological Knowledge. *Human Ecology* 40 (1): 15-27.

Sakakabira, C. 2010. Kiavallakkikput Agviq (Into Whaling Cycle): Cataceousness and Climate Change among the Inupiat of Arctic Alaska. *Annals of the Association of American Geographers* 100 (4): 1003-1012.

Salick J, Byg A. 2007. *Indigenous peoples and climate change. Tyndall Centre for Climate Change Research*. University of Oxford Press, Oxford

Schroeder, Heike. 2010. Agency in international climate negotiations: the case of indigenous peoples and avoided deforestation. *International Environmental Agreements: Politics, Law and Economics* 10 (4): 317-332.

Shackeroff, J.M. and Campbell, L.M., 2007. Traditional ecological knowledge in conservation research: problems and prospects for their constructive engagement. *Conservation and Society*, 5(3): 343-360.

Shimrah, T., 2017. Traditional ecological knowledge system as climate change adaptation strategies for mountain community of Tangkhul Tribe in Northeast India. *International Journal of Environmental and Ecological Engineering*, *11*(7): 686-693.

Simpson, Leanne Betasamosake. 2017. *As We Have Always Done: Indigenous Freedom through Radical Resistance*. University of Minnesota Press.

Simpson, L. 2011. *Dancing on Our Turtle's Back: Stories of Nishnaabeg Re-creation, Resurgence and a New Emergence*. Arbeiter Ring Publishing, Manitoba, Canada.

Simpson, L. 2004. Anticolonial Strategies for the Recovery and Maintenance of Indigenous Knowledge. *The American Indian Quarterly* 28 (3):373-384.

Simpson, Leanne. 1999. *The Construction of Traditional Ecological Knowledge: Issues, Insights and Implications*. PhD dissertation, University of Manitoba.

Spoon, J. and Arnold, R., 2012. Collaborative Research and Co-Learning: Integrating Nuwuvi (Southern Paiute) Ecological Knowledge and Spirituality to Revitalize a Fragmented Land. *Journal for the Study of Religion, Nature & Culture*, 6(4).

Tengö, M., Brondizio, E.S., Elmqvist, T., Malmer, P. and Spierenburg, M., 2014. Connecting diverse knowledge systems for enhanced ecosystem governance: the multiple evidence base approach. *Ambio*, 43(5): 579-591.

Turner, N.J., L.J. Luczaj, P. Migliorini, A. Pieroni, A.L. Dreon, L.E. Sacchetti, and M.G. Paoletti. 2011. Edible and Tended Wild Plants, Traditional Ecological Knowledge and Agroecology. *Critical Reviews in Plant Sciences* 30 (1):198 - 225.

Weatherhead, E., S. Gearheard, and R.G. Barry. 2010. Changes in weather persistence: Insight from Inuit knowledge. *Global Environmental Change* 20 (3):523-528.

Whyte, K.P. 2016. Our ancestors' dystopia now: Indigenous conservation and the Anthropocene.

Whyte, K.P. 2017. Indigenous climate change studies: Indigenizing futures, decolonizing the Anthropocene. *English Language Notes* 55 (1): 153-162.

Whyte, K.P. 2018. Indigenous science (fiction) for the Anthropocene: ancestral dystopias and fantasies of climate crises. *Environment & Planning E: Nature and Space*:1–18. <u>https://doi.org/10.1177/2514848618777621</u>

Whyte, K. P. 2014. Indigenous women, climate change impacts, and collective action. *Hypatia* 29 (3): 599-616.

Wildcat, D. R. 2013. Introduction: Climate Change and Indigenous Peoples of the USA. *Climatic Change* 120 (3): 509–15. <u>https://doi.org/10.1007/s10584-013-0849-6</u>.

Wotkyns, S.R. 2013. Traditional Knowledge: Safeguarding Indigenous Knowledge. In Tribes and Climate Change. *Institute for Tribal Environmental Professionals*. <u>http://www7.nau.edu/itep/main/tcc/Tribes/tdk_sguard</u>

3. Law and Intellectual property rights

Anaya S.J. 2009. *International human rights and indigenous peoples*. Wolters Kluwer Law & Business, New York.

Hansen, S. and VanFleet, J., 2003. *Traditional Knowedge and Intellectual Property: A Handbook on Issues and Options for Traditional Knowledge Holders in Protecting their Intellectual Property and Maintaining Biological Diversity.* American Association for the Advancement of Science.

Williams T, Hardison P. 2013. Culture, law, risk and governance: contexts of traditional knowledge in climate change adaptation. *J Clim Chg* 120(3):531–544. <u>https://doi.org/10.1007/s10584-013-0850-0</u>

4. Ethical frameworks and methodology

Climate and Traditional Knowledges Workgroup. 2015. The ethics of traditional knowledge exchange in climate change initiatives. *Earth.*

https://earthzine.org/2015/07/31/the-ethics-of-traditional-knowledge-exchange-in-climate-change-initiatives

Chakraborty, Ritodhi, Mabel D Gergan, Pasang Y Sherpa, and Costanza Rampini. 2021. A Plural Climate Studies Framework for the Himalayas. *Current Opinion in Environmental Sustainability* 51 (August): 42–54. <u>https://doi.org/10.1016/j.cosust.2021.02.005</u>.

Houde, N., 2007. The six faces of traditional ecological knowledge: challenges and opportunities for Canadian co-management arrangements. *Ecology and Society*, 12(2).

Latulippe, N. and Klenk, N., 2020. Making room and moving over: knowledge co-production, Indigenous knowledge sovereignty and the politics of global environmental change decision-making. *Current Opinion in Environmental Sustainability*, *42*, pp.7-14.

Tribal Adaptation Menu Team. 2019. Dibaginjigaadeg Anishinaabe Ezhitwaad: A Tribal Climate Adaptation Menu. Great Lakes Indian Fish and Wildlife Commission, Odanah, Wisconsin. 54 p

Smith, L. T. 2012. *Decolonizing Methodologies: Research and Indigenous Peoples*. 3rd ed. Book, Whole. London: Zed Books.

5. Specific Guidelines and protocols

Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS). 2020. *Code of Ethics for Aboriginal and Torres Strait Islander Research*. <u>https://aiatsis.gov.au/research/ethical-research/code-ethics</u>

Climate and Traditional Knowledge Workgroup. 2014. Guidelines for Considering Traditional Knowledge in Climate Change Initiatives. <u>https://climatetkw.wordpress.com</u>

Climate and Traditional Knowledge Workgroup. *The Ethics of Traditional Knowledge Exchange in Climate Change Initiatives*.

https://earthzine.org/the-ethics-of-traditional-knowledge-exchange-in-climate-change-initiatives/

Inuit Tapiriit Kanatami and Nunavut Research Institute. 2007. *Negotiating Research Relationships with Inuit Communities: A Guide for Researchers*.

McKenzie Valley Review Board. 2005. *Guidelines for Incorporating Traditional Knowledge in Environmental Impact Assessment*.

https://reviewboard.ca/upload/ref_library/1247177561_MVReviewBoard_Traditional_Knowledge _Guidelines.pdf Tribal Adaptation Menu Team. 2019. *Dibaginjigaadeg Anishinaabe Ezhitwaad: A Tribal Climate Adaptation Menu*. Great Lakes Indian Fish and Wildlife Commission, Odanah, Wisconsin. <u>https://forestadaptation.org/learn/resource-finder/tribal-climate-adaptation-menu</u>

United Nations & Framework Convention on Climate Change. 2013. Best practices and available tools for the use of indigenous and traditional knowledge and practices for adaptation, and the application of gender-sensitive approaches and tools for understanding and assessing impacts, vulnerability and adaptation to climate change. *Technical Paper*. https://unfccc.int/resource/docs/2013/tp/11.pdf

6. Other resources

Ecological Society of America: <u>https://www.esa.org/</u> (James is head of the TEK section)

The Group on Earth Observations (GEO) Indigenous Alliance: <u>https://un-spbf.org/event/geo-indigenous-alliance-2020-report/</u> (James is involved)

Annotated Bibliography: Examples of Traditional Knowledges in Climate Research (2014). https://climatetkw.files.wordpress.com/2014/09/tks_guidelines_annotated_bib_v1.pdf