



Ethical Dilemmas in Health and Climate Research

A Case Study on Indigenous Rights and Mutual Benefits

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Introduction



Biodiversity and Climate Change Impact



With livelihoods that are often highly dependent on the environment, the increased frequency and severity of climate anomalies can significantly affect indigenous communities¹

¹van Gevelt, T., Abok, H., Bennett, M. M., Fam, S. D., George, F., Kulathuramaiyer, N., Low, C. T., & Zaman, T. (2019). Indigenous perceptions of climate anomalies in Malaysian Borneo. *Global Environmental Change*, 58, 101974. <https://doi.org/https://doi.org/10.1016/j.gloenvcha.2019.101974>

Dr Hart and the Research Team

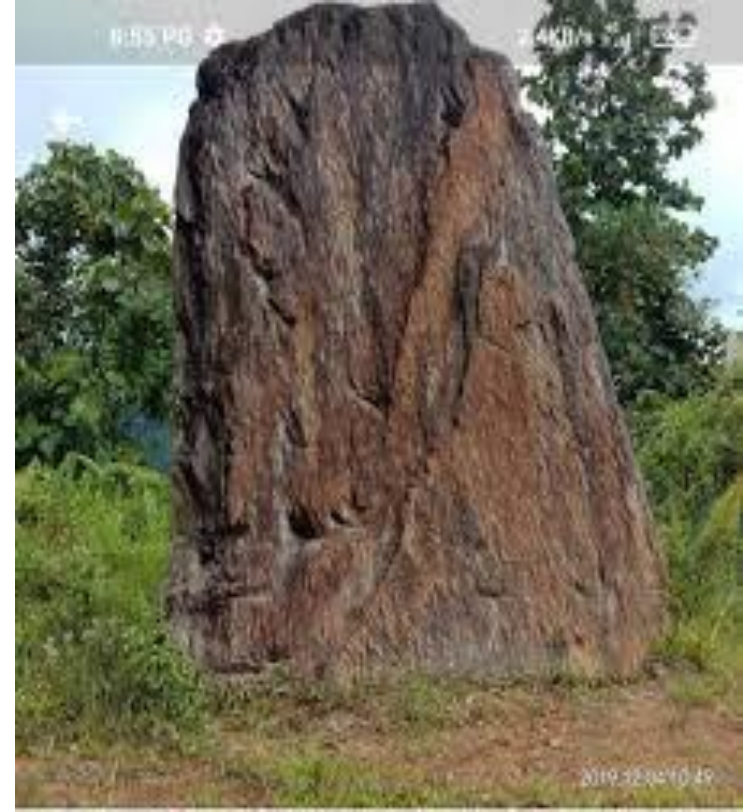


Aim : To document the effects of climate change on traditional medicinal practices and integrate scientific methods with Indigenous knowledge.

Tension Arise



Introduction of Technology and Community's Spiritual Concerns



Research Findings and Proposed Scientific Solutions

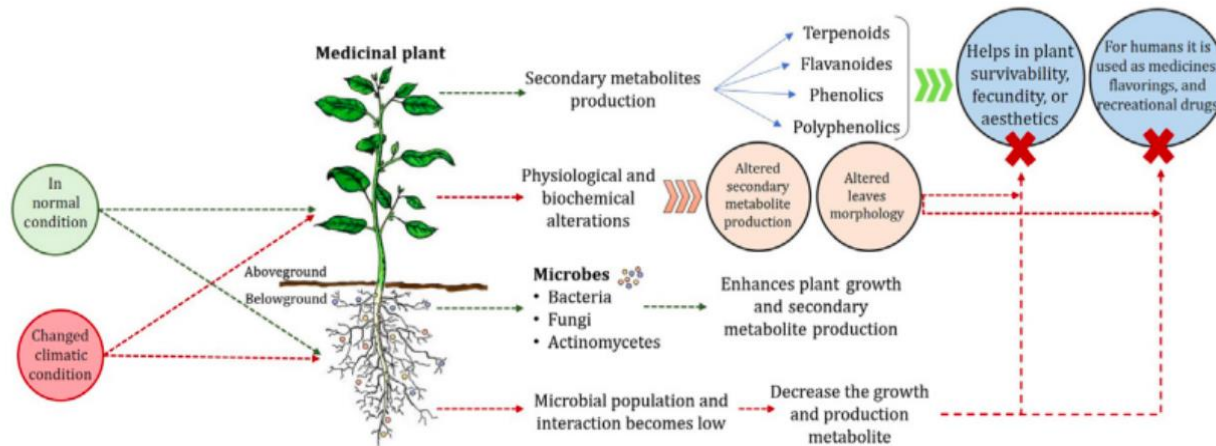


Figure 8.1 Overview of medicinal plants under climate change conditions.

Proposed Solution!

Genetic Modification!

Community Response

Innovation

Unnatural Violation of Nature



“We hoped for a partnership, but we became subjects in an experiment”
- Aman, Local Healer



Ethical Issue : Climate Justice and Equity in Research



Climate change disproportionately impacts Indigenous communities, disrupting traditional medicine and livelihoods they rely on¹.

Despite their minimal role in causing these issues, they bear the burden as their environment—and health systems—deteriorate, endangering their cultural legacy and well-being.

¹ Redvers, N., Aubrey, P., Celidwen, Y., & Hill, K. (2023). Indigenous Peoples: Traditional knowledges, climate change, and health. *PLOS global public health*, 3(10), e0002474. <https://doi.org/10.1371/journal.pgph.0002474>

Ethical Issue : Researcher Responsibility

Researchers like Dr Hart, often from institutions in wealthier nations that have contributed to climate change, carry an ethical duty to prioritize solutions that truly benefit the communities most affected by climate change.

Instead of focusing on academic recognition or high-tech approaches, research should **address local needs, support overburdened healthcare systems, and empower Indigenous communities to lead adaptation efforts.**

By respecting Indigenous rights and fostering local resilience, we can contribute to equitable and just climate solutions.

Equitable Knowledge Sharing and Biodiversity Conservation



Failure to recognize and integrate Indigenous knowledge, as depicted in the case study, may disrupt the relationship between the community and researchers.

¹ Dawson, N. M., B. Coolsaet, E. J. Sterling, R. Loveridge, N. D. Gross-Camp, S. Wongbusarakum, K. K. Sangha, L. M. Scherl, H. Phuong Phan, N. Zafra-Calvo, W. G. Lavey, P. Byakagaba, C. J. Idrobo, A. Chenet, N. J. Bennett, S. Mansourian, and F. J. RosadoMay. 2021. The role of Indigenous peoples and local communities in effective and equitable conservation. *Ecology and Society* 26 (3):19. <https://doi.org/10.5751/ES-12625-260319>

² Byg, A., Salick, J., 2009. Local perspectives on a global phenomenon. *Climate change in Eastern Tibetan villages*. *Glob. Environ. Change* 19, 156-166

³ Hosen, N., & Nakamura, H. (2018). Traditional Ecological Knowledge and Climate Change: An Introduction. *Proceedings of the 12th South East Asian Technical University Consortium (SEATUC)*, 1.

⁴ Makondo, C. C., & Thomas, D. S. G. (2018). Climate change adaptation: Linking indigenous knowledge with western science for effective adaptation. *Environmental Science & Policy*, 88, 83-91. <https://doi.org/https://doi.org/10.1016/j.envsci.2018.06.014>

Recommendations



Empower Indigenous Voices in Climate Solutions



Research for Community, Not Just Academia



Balance Science and Indigenous Knowledge



Recommendations



Respect and Compensate Indigenous Knowledge



Support Indigenous-led Climate Solutions



Commit to Long-term, Ethical Partnerships

COMMUNITY

SCIENCE

JUSTICE



Acknowledgement



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