

Establishing Climate Communication as the Third Sphere of Climate Action

Introduction

Despite decades of climate science and technological advances, global climate action remains insufficient due to critical gaps in societal engagement. Currently, climate action focuses on mitigation and adaptation strategies, oftentimes overlooking the social, psychological, and cultural barriers that prevent meaningful action. The climate crisis demands more than mitigation and adaptation; it requires addressing the human dimensions that shape public response.

Throughout the MACAL program, I had the opportunity to delve deeply into the complex challenges that obstruct effective climate action. Approaching these issues through a transdisciplinary lens emphasized the critical role of climate communication alongside mitigation and adaptation.

Challenges

Narrow Scope: Current climate action approaches focus on mitigation and adaptation, neglecting the social dimensions of climate change.^{9, 13}

Knowledge–Action Gap: Scientific knowledge often fails to translate into meaningful action due to barriers that limit engagement and hinder practical solutions.^{1, 2, 7}

Human-Centric Barriers: The lack of effective climate response can be attributed to human-centric factors, including social, psychological, and cultural barriers.^{11, 12}

Misallocation of Resources: While most major challenges to climate action fall in the realm of social sciences, technical sciences receive over 10x more climate funding.^{3, 10}

“Climate action means stepped-up efforts to reduce greenhouse gas emissions and strengthen resilience and adaptive capacity to climate-induced impacts”
United Nations Development Programme¹²

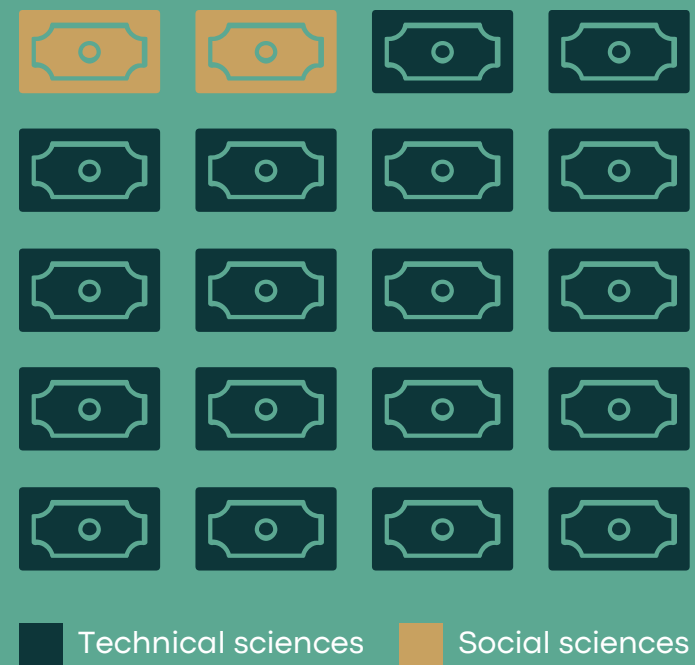


Figure 1. Difference of climate funding between technical sciences and social sciences.¹⁰

Proposed Framework

Addressing the challenges posed by climate change requires a dedicated approach to climate communication. This framework redefines climate action into three equal core components: 1) **Mitigation** to reduce emissions, 2) **Adaptation** to build resilience, and 3) **Communication** to engage and mobilize society (Figure 2).

Uniquely positioned to connect scientific knowledge with practical action, climate communication has the power to address the social dimensions that shape how people perceive and engage with climate issues⁸. Redefining climate action to include climate communication can legitimize its role within climate action and help redirect climate funding toward social sciences, addressing the climate challenges that go beyond technical solutions. By enabling faster public buy-in and supporting large-scale behaviour change, this approach can bridge the science–practice gap and enhance the overall impact of mitigation and adaptation efforts.

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The Three Spheres of Climate Action

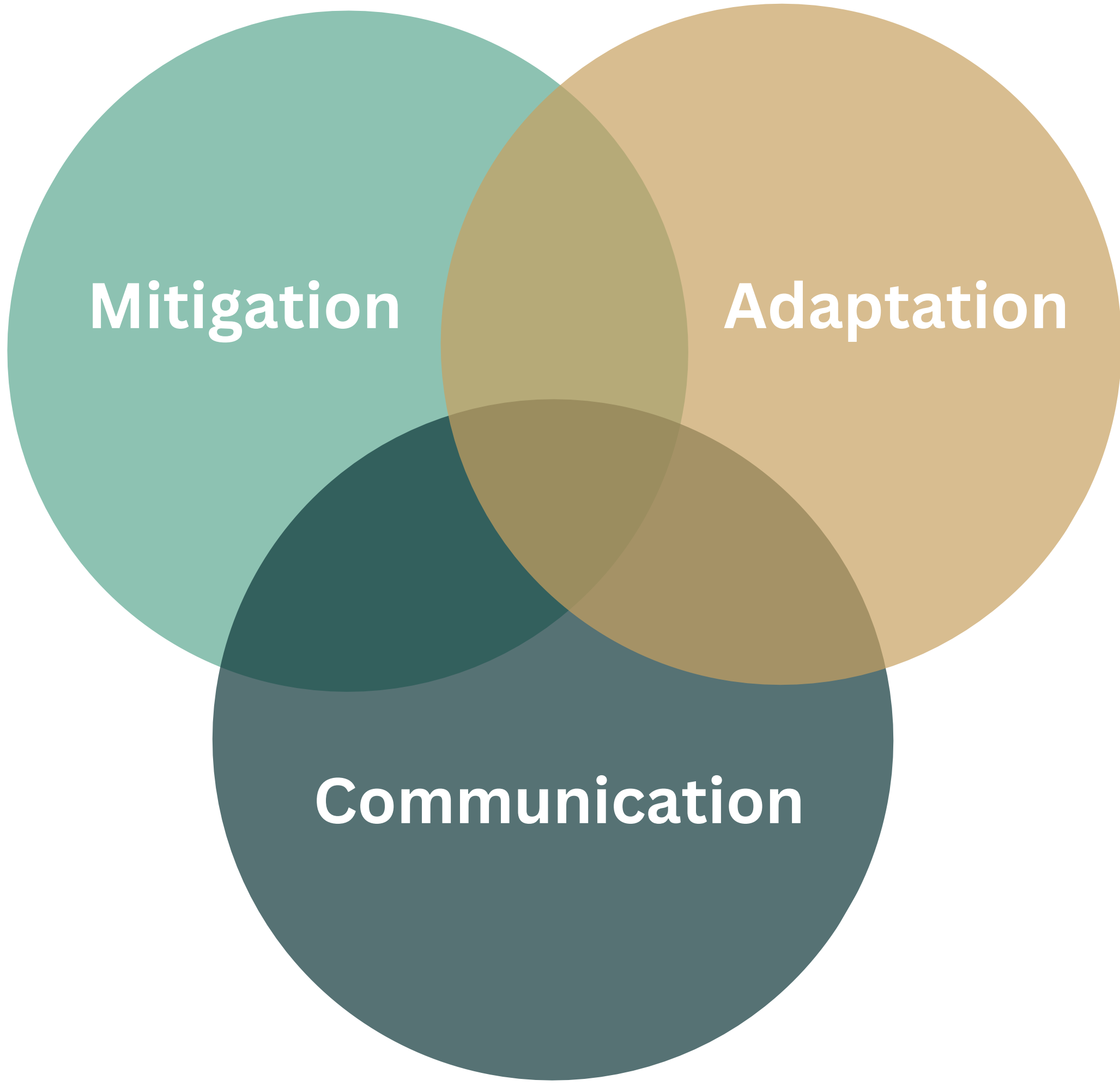


Figure 2. Proposed climate action framework consisting of three core spheres: mitigation, adaptation, communication.

Theoretical Foundation

Rooted in transdisciplinarity, deep ecology, and polycentric governance principles, the proposed triad approach aims to build on ecological values, foster innovative strategies, and mobilize coordinated efforts across diverse governance levels.



Transdisciplinarity embraces multiple ways of knowing to create inclusive strategies that respect diverse values, epistemologies, and cultural contexts.⁶

Deep ecology fosters ecological values that emphasize the inherent worth of nature, strengthening long-term climate commitments.⁴

Polycentric governance cultivates innovation, trust, and adaptability by encouraging collaboration across governance levels.⁵

References

1. Arteaga, et al. (2023). *Unpacking the theory–practice gap in climate adaptation*. Climate Risk Management, 42, 100567.
2. Baker et al. (2020). *The social structure of climate change research and practitioner engagement: Evidence from California*. Global Environmental Change, 149(3–4), 289–303.
3. Brulle, R. J. (2018). *The climate lobby: A sectoral analysis of lobbying spending on climate change in the USA, 2000 to 2016*. Climatic Change, 149(3–4), 289–303.
4. Flor, A., G. (2004) *Environmental communication: Principles, approaches and strategies of communication applied to environmental management*. UP Open University.
5. Jordan, et al. (Eds.). (2018). *Governing Climate Change: Polycentricity in Action?* (1st ed.). Cambridge University Press.
6. Klenk, N., & Meehan, K. (2015). *Climate change and transdisciplinary science: Problematising the integration imperative*. Environmental Science & Policy, 54, 160–167.
7. Mooney et al. (2022). *The demise of the knowledge–action gap in climate change education*, 103, 10. Bulletin of the American Meteorological Society.
8. Moser, S. C. (2016). *Reflections on climate change communication research and practice in the second decade of the 21st century: What more is there to say?* WIREs Climate Change, 7(3), 345–369.
9. NASA. (n.d.). *Responding to climate change*. NASA Science.
10. Overland, I., & Savacool, B. K. (2020). *The misallocation of climate research funding*. Energy Research & Social Science, 62, 101349.
11. Stoknes, P. E. (2014). *Rethinking climate communications and the “psychological climate paradox”*. Energy Research & Social Science, 1, 161–170.
12. Stoknes, P., E. (2015). *What we think about when we try not to think about global warming: Toward a new psychology of climate action*. Chelsea Green Publishing.
13. United National Development Programme [UNDP]. (n.d.). *FAQ–Enhancing human security through local climate actions*. UNDP Nepal.

Pato Gonzalez–Marquez
MACAL
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