

Advancing Climate Resilience through Transdisciplinary Approaches

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In 2015, a consortium of multi-national partners supported a suite of projects focused on “Climate Predictability and Inter-Regional Linkages”, a thematic focus advanced by the Belmont Forum and JPI-Climate. While this focus is a priority amongst the physical sciences, it also has direct linkages to social sciences and humanities (SSH) and a diversity of stakeholders from across sectors and national boundaries. To meet Belmont Forum criteria of multi-national, transdisciplinary approaches to “understanding, mitigating, and adapting to global environmental change”, each awarded team was required to employ the expertise of natural scientists, social scientists, and stakeholders in the co-creation and co-implementation of the project.

Climate and climate variability have inherent connections with planning and decision-making processes, which require understanding of value systems, behavior, infrastructure, resource chains, and capacity. Climate is not the only driver in these complex systems, and climate change is not the only response to the decision-making process. When investigating teleconnections or transboundary processes, as was encouraged through the inter-regional aspects of the call for proposals, there is added emphasis on multi-level governance and the influence of remote agreements on local-to-regional action. Having social science expertise to frame this interaction and advance research on the human processes that dictate response, uptake, and acceptance is critical to project success.

By including stakeholders in the development and implementation of the project, perspective is built into the conceptualization. It also helps shape the communication and dissemination approaches and avenues for maximum impact and transparency. The two-way street – the end-to-end – is always present in these transdisciplinary projects. Stakeholders can vary, from local communities developing adaptation schemes to NGOs with missions to respond to climate-related emergencies, government entities responsible for operationalizing the results, private sector organizations addressing climate goals, and multi-national consultative processes focused on mitigation strategies. Their participation brings added value that extends long after the project is completed, as it moves into action, education, and innovation.

The combination of social and societal with the physical is optimal for crossing the divide between research and implementation, fundamental and applied funding, academia and end-users, prediction and action. The Belmont Forum and JPI-Climate look forward to the results from these funded projects to highlight best practices and lessons learned to increase multi-national, transdisciplinary approaches for climate understanding, adaptation, and mitigation.

Key words: transdisciplinary, added-value, inter-regional