

Transdisciplinary Methods for Researching and Supporting Ecological Entrepreneurship: Researcher-Merchant Partnerships in Cambodia

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This paper focuses primarily on methodological considerations for the rapid development of supportive *boundary settings*—in this case, researcher-merchant partnerships—that facilitate transdisciplinary research in social or ecological enterprise. As a premise, I recognize that although theoretical debates on transdisciplinarity (TD) continue, simultaneous forays into practical implementation of transdisciplinary research can begin answering many of the questions raised by these debates, as well as highlight points of interface with existing development research projects and research priorities. The enthusiastic promotion of social and ecological entrepreneurship through development assistance, popularized through practices such as micro-credit, often results in autonomous and diverse initiatives that are challenging to monitor and research. These characteristics, however, are commensurate with transdisciplinary research methods, which aim to flatten hierarchical relationships between researchers and the researched, and encourage integration of different types of knowledge. Generally, transdisciplinary research has come to encompass a process through which complex and diverse problems in the life-world are explored by interdisciplinary measures and collaborative relationships with local stakeholders. Researcher-merchant partnerships, the focus in this paper, allow local entrepreneurs and development researchers to collaborate in a mutually beneficial manner that serves to create data for the researcher while, at the same time, supporting the advancement of an ecological enterprise. In the methodology I outline in this paper, three additional aspects of transdisciplinarity are fulfilled: engaging in action research, or demand-driven research, using research resources for social good, and recursive mutual learning.

For this paper, a researcher-merchant partnership represents a medium to long-term shared financial stake and collaborative relationship in (part of) an enterprise. Such smaller-scale enterprises in developing countries—particularly socially or ecologically sustainable initiatives—often lack two important resources that researchers can potentially provide: market analysis and credit. Researchers, in turn, typically lack two resources that entrepreneurs can provide: market data and access to entrepreneurial activities. In many cases, enterprises promoting sustainable production and consumption are simultaneously worthy of studying

and worthy of financial support. For enterprises of corresponding scale, individual researchers or larger projects can serve as investors and partners in exchange for privileged research access and shared control over the data collection activities of the enterprise. The entrepreneur benefits by receiving a line of credit (often with favorable conditions), an unpaid associate, and the results of the researcher's data analysis. In this article, I detail two transdisciplinary fieldwork experiences involving small-scale enterprises for organic rice and traditional medicine in Cambodia. In both cases, the researcher's financial stake in the enterprise was the precondition for a research partnership, while the data collected from the process is the primary reward.

Setting up these research partnerships amounts to rapidly generating what Mollinga has called a *boundary setting*, which is the physical space and long-term relationships that facilitate transdisciplinary boundary work. Critical for transdisciplinary research, the shared problem in researcher-merchant partnerships is identified implicitly and is formalized from the outset (i.e., profitability and data gathering) while the processes that contribute to this are open to rearrangement following recursive mutual learning. In addition to the shared motivation for sustainable development and empowerment derived from social and ecological entrepreneurship, the financial stake of all parties mandates a long-term and continuous relationship. This relationship simultaneously serves to flatten the typical research hierarchy and provide both parties understanding in to the perspectives and demands from their respective constituencies (e.g., family, customers, PhD supervisors, research project coordinators, etc.). These "hermeneutic frameworks" provide a platform for reflection, transformation of attitudes, development of personal competencies, institution building, and of course economic development.

Based on the experience of the author, smaller-scale researcher-merchant partnerships can also facilitate individual research experiences and help manage institutional restrictions on interdisciplinarity. The rigor imposed by these partnerships, for example, demands and advances broad interdisciplinary preparation and embeddedness in fieldwork; the partnership, in turn, provides multi-faceted data for analysis. The "data" (or knowledge) production from the partnership generally falls into three categories: (1) collected data (from shared gathering), (2) data about the process of forming, maintaining and evolving the partnership, and (3) data obtained through critical reflection after recursive self-learning and conscientization by all parties. These data fit the model of so-called post-normal science, which engages practitioner or group validation of data. Through this process, some of the

early analysis is completed together in the field, while the long-term relationships allow for subsequent follow-up, discussion, and revision. Due to their smaller-scale, researcher-merchant partnerships are suited to extended PhD fieldwork and/or smaller project-based research (ideally promoting a hybrid sort of transdisciplinary). To attend specifically to this readership in this paper, I introduce the methodological basis, project scoping techniques, and practical structuring of researcher-merchant partnerships that I engaged in, paying close attention to issues that arise in the areas of ethics, researcher bias, reflexivity, and financial risk. I also explored the advantages, disadvantages, and limitations of this kind of research arrangement as well as make comparisons with other transdisciplinary partnership models.

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