Socio-Environmental Impacts of Large Hydropower Dams across the Global South

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Associated Program:
Pursuit Program [1]

More than 3,700 dams are planned or under construction across the Global South, with projects in the Mekong and the Amazon the most numerous at present. Among infrastructure projects, hydropower dams loom large. Hydropower is the leading source of renewable energy across the world, accounting for up to 71% of this supply as of 2016. We will operationalize and use a framework that integrates existing approaches (anti-dam and mitigation) and that takes into account the possibility of local communities playing a significant role in defining alternatives to those presented by dam builders in order to minimize socio-ecological impacts and maximize benefits (i.e., what we call sustainability transitions). While we will look at both upstream and downstream communities, we will focus on impacts on communities and ecosystems downstream of hydropower dams because these communities and ecosystems have been ignored in dam planning, in consultation processes, and in social and environmental impact assessments. Downstream communities experience the most significant and unaddressed impacts of large dams. Most of the attention to date has been on upstream impacts, and we offer a corrective to this oversight. The Pursuit is appropriate for SESYNC because it addresses a priority topical area on large infrastructure impact and has data synthesis goals for this topic. We will be extracting relevant variables from different data sets brought by participants to the pursuit and will combine them into indicators to address new research questions based on the framework, write synthesis papers, and prepare new research projects. Data will be made available more widely as appendices to published papers and via SESYNC’s webpage, if possible, upon project completion.

Source URL:
https://www.sesync.org/project/proposal/socio-environmental-impacts-of-large-hydropower-dams-across-the-global

Links
[1] https://www.sesync.org/opportunities/research-thematic-pursuits/pursuit-program