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Understanding the vulnerabilty of rural communities to changes in access to river, water and forests: Implications of the proposed Lower Sesan Dam in Cambodia

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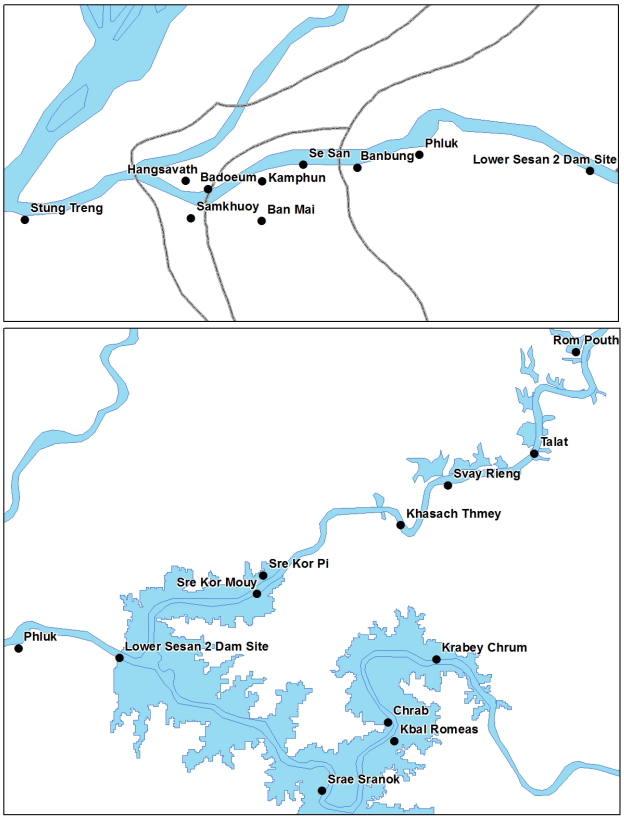

LOCATION OF THE VILLAGES SURVEYED (TOP – DOWNSTREAM VILLAGES; BOTTOM – UPSTREAM VILLAGES)

Key Message

Hydropower planning and development often overlooks the full range of water value derived from free flowing rivers by local communities and as a result negative impacts are underestimated during EIA processes. A comprehensive integrated framework for assessing a broader range of water values can help understand the trade-offs due to hydropower development and also fill the gap in conventional EIA approaches.

Summary

The Lower Sesan 2 Hydropower Project has been proposed at a site 2km below the confluence of the Sesan and Srepok rivers, two major tributaries of the Mekong River in Northeast Cambodia. The resulting dam reservoir would inundate large area of forests, human settlements, and river channels, requiring resettlement of thousands of people. Moreover, access to water resources will be fundamentally transformed for the local communities both upstream and downstream of the dam, affecting their livelihoods and daily lives in many different ways, including bathing, washing, transportation, and fishing. When downstream hydrological changes are taken into consideration, the impact zone extends well beyond the geographic areas covered by the EIA. The value of water from the river, in its various uses, should be assessed before the construction starts, so that a wide range of stakeholder groups, potential losses, and trade-offs can be clearly identified, and unanticipated negative impacts can be avoided or mitigated. In reality, the resettlement program focuses on compensating the direct loss of household assets. Through an integrated water valuation framework we assess the current value of water derived from these rivers both at the household and sub-basin levels, before the dam is constructed. Hydrological changes after the construction will be estimated and provide a basis for analyzing future trade-offs, losses, and benefits. Documenting the variety of water uses and values, often overlooked in cost-benefit analysis of hydropower project, the study will provide information for improving the future hydropower development strategy and EIA processes.