



LILY HOUSE-PETERS
University of Arizona
USA

I am a Ph.D. candidate in the School of Geography and Development at the University of Arizona and a current Fulbright student fellow, conducting dissertation fieldwork in Sonora, Mexico. Situated in the context of global processes of rapid urbanization, industrial mining, intensive agriculture, and climatic change, my research integrates theory, methods, and techniques from the social and physical sciences to advance understanding of the complex human and natural systems that shape land and water use decisions in riparian corridors. Riparian corridors, the narrow, densely forested floodplains located adjacent to rivers, provide a disproportionately high level of ecosystem services and support a wide range of economic activities. However, in semi-arid regions, growing competition for scarce water resources and predictions of increased aridity and modified precipitation seasonality under climate change are significant sources of stress for these social-ecological systems. Although riparian ecosystems exhibit high inherent resilience (the capacity of the system to absorb disturbance and retain basic structure and function), intensive anthropogenic alterations can cause resilience to decline, resulting in the ability of progressively smaller shocks to cause the system to lose its capacity to maintain its structure, perform functions, and provide the ecosystem services on which both human and non-human communities depend. Specifically, my dissertation research focuses on the impacts of short- and long-term drought cycles, shifting property regimes, urbanization, industrial mining, and ranching on riparian resilience in the Sonoran borderlands.