ENGINEERS WITHOUT BORDERS USA
Michigan Technological University Chapter

Project Overview

Michigan Technological University's chapter of Engineers Without Borders-USA is nearing completion of our road construction project with the community of Santa Barbara, Bolivia. The community of approximately 50 families rely on this road to reach the city of Buena Vista, where they have access to basic supplies, schools, and healthcare. Historically, the road has been in disrepair due to damage caused by a long rainy season and a poor maintenance plan. Every year the road washes out in multiple locations, resulting in dangerous driving conditions. EWB-MTU has designed and constructed multiple improvements to provide an economically and environmentally sustainable road that will remain open and safe throughout the rainy season.

Recent Work

Following trips in 2019, 2022 and 2023, EWB-MTU traveled back in April 2025 to complete our largest construction project yet. This involved the construction of multiple locally available erosion control and drainage technologies. Over a period of 8 days, EWB members worked alongside the community of Santa Barbara and the local NGO Etta Projects to grade the slope of a 70-meter section of road, install rock gabions, and construct a cobble-lined ditch for drainage. Immediately following the trip, the parties signed an agreement for regular monitoring and maintenance of the new infrastructure.

Future Work

We will assess the need for further implementation of erosion control when the rainy season begins this October. If there is no further construction required, we will transition to monitoring the long-term project performance. The next project the chapter is considering is renovation work for the community's grade school building. Currently, there are multiple features in disrepair, such as a roof that leaks during the rainy season, requiring students to move to another location. EWB-MTU looks forward to continuing our relationship with the community of Santa Barbara and working with them to overcome the infrastructure challenges they face.