

# FOOTBRIDGE FOR THE SCHOOL OF EL YOMO IN EL SALVADOR

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## Summary

The El Salvador Project is a student-led initiative born in 2001 at Imperial College London that provides simple and effective engineering solutions to rural communities in El Salvador. The projects are developed in close collaboration with the Salvadorian NGO REDES and the UK-based charity Engage for Development.

During the summer of 2019, El Salvador Project funded and participated in the construction of a footbridge for the school of the community of El Yomo, in the town of Alegría. The footbridge was intended to restore the path connecting the main settlement with the local school, which heavy rainfall had eroded in the previous years forming an impassable ravine. For the kids to go to school every day, they had to take a longer and dangerous route that passed through private properties, which was a source of conflict. This bridge was a solution to their problems.

The footbridge was designed as a 15 m long steel truss beam supported on masonry walls. The construction was a collective effort involving the local community, from experienced workers to the children of the school, personnel from the local administration of Alegría, a local engineer, a welding team, people from REDES and the students from Imperial College. The main challenges faced during construction were the unexpected conditions of the site, the unreliable supply of materials and the lack of means for excavation, lifting and auxiliary constructions. The success of the project relied considerably on the knowledge of the local workers.

The involvement of the community helped develop a feeling of ownership over the project which resulted in a strong commitment in its maintenance since the opening. The footbridge was enthusiastically inaugurated by the community and has provided the children of El Yomo with a safer and faster route to their school, based on a comprehensive risk management approach.



*Fig. 1. View of the footbridge near to completion.*

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