

Creating partnerships which transcend borders

Here, we probe a fundamental question: How can the international community improve development initiatives, making them more sustainable? Engineers Without Borders is an effective model for building partnerships with rural communities.



Xiquin Sanahi, a community in Guatemala, has been working with Engineers Without Borders to develop a successful water distribution system to provide water to their community.

Introduction

For many years, aid organizations and other non-governmental organizations (NGOs) have conducted work for developing countries. Projects that fell under this category cost a lot of money, but were not sustained and maintained. Engineers Without Borders's main objective is to develop a partnership with a community. This means we do engineering work and projects with the community. The people we work with are passionate and driven - utilizing this facet and inner drive that they already possess allows us to design sustainable solutions that can last several decades.

The Process of Selecting Communities

In order to search for communities, we create a search committee to investigate all potential communities to partner with. This committee reaches out across our network, through mentors, resources on the University of Minnesota campus, and through the national EWB chapter, various communities that need assistance.

We then undergo a project selection process which relies heavily on communication and acquiring information from our contacts in the community.

Decision-Making Matrix

Our scoring process relies on important data points collected by our search committee. Each project is objectively evaluated on various factors. The NGO partnership is also evaluated, along with project scope.

Country

- Availability of Common Resources
- Transportation
- Travel Hazards
- Diseases
- Political Stability
- Language Barrier
- Typical travel costs to country

Community

- Crime Rate
- Water Safety
- Access to Healthcare
- Leadership
- Elevation
- Climate
- Size of Community

NGO

- Communication
- NGO Motives
- Mission/Objective
- Reports of corruption

A process maximizing sustainable impact using community collaboration

Assessment Trip: Determining viability and scope

In order to determine the viability and scope of the project, assessing the community becomes imperative. This trip helps our project to build ties with the community, collect data to help navigate our design, and collect preliminary data to help monitor our impact on the community. Data regarding the design may include geological surveying of elevation, velocity and quantity of water flow, etc. When implementing smaller projects, our project leads may decide to merge their implementation with another assessment to speed up the implementation of projects.



Implementation Trip

After working throughout the year with students at the University of Minnesota and mentors, the implementation trip is the opportunity to construct the project. In addition to executing the design, the travel team ensures that the community has the capacity to repair and maintain the system. During this time, the travel team utilizes the help of community members to finalize the design and construct the particular system.

One component of the implementation trip is to leave behind a manual which aids in instruction if any repairs were to take place.



Project Monitoring Trip

Our final trip to the community is a project monitoring trip. This trip serves several important functions. First, it allows us to determine the functionality of the implementation we conducted. If any breaks or issues appear, our project leads ensure that we have the capacity to address those challenges.

Another function this trip serves is to close out our communication and relationship with the community. This is important in order to maintain a sustainable relationship. If in the future, the community encounters any challenges, our organization wants to make our group available for consultation and assistance.



This process of constructing the design, collecting data, and implementation works closely with the community. The monitoring process also relies heavily on community feedback. This ensures sustainability in the long run.



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