# EWB-USA PRINCIPLES OF DEVELOPMENT



#### 1. ENGINEERING

All EWB-USA projects are engineering related. As our name indicates, our focus as a development organization is on providing engineering expertise to address community-identified infrastructure needs. We value the importance of a holistic approach to community-identified infrastructure needs.

nity development work. However, additional disciplines will be employed through our work in so far as they relate to and support the core engineering project being designed. Our organization and its members will not adopt projects that lack an engineering design element. For example, projects that are strictly public health, business development or microfinance related are outside of our organizational scope.



#### 2. COMMUNITY-DRIVEN

All EWB-USA programs are community based. This principle reflects the bottom up approach to development that is used by EWB-USA. Each EWB-USA program is developed to be specific to the needs, resources and constraints of the community with which the chapter is partnering. EWB-USA programs do not start with a technology and then try

to find a community where it can be implemented. Each program has a well-defined community that has requested assistance from EWB-USA.

3. COMMITMENT



**EWB-USA** chapters develop a partnership with a community that lasts at least five years. The EWB-USA chapter and the community with which they partner provide equal input in the development effort with each party contributing to the success of the program. The expected contribution from all parties involved with the program is generally described in detail in a written agreement that is developed cooperatively and signed by all parties. EWB-USA chapters maintain a long-term commitment to the community to provide continued guidance with operation and maintenance of the facilities, provide continued education and training as required and carry out monitoring of the program.

## 4. QUALITY

**EWB-USA** chapters are required to comply with the established project process. EWB-USA has a well established project process. This is the basis of its quality control program. This consists of a) regular reporting (pre-assessment, post-assessment, alternatives analysis, preliminary design, pre-implementation, post-implementation, pre-monitoring, post-monitoring and program closeout) about programs, b) review of each report by an EWB-USA project manager followed by discussion with the chapter and c) review of all planned implementation activities by a technical advisory committee (TAC).

### **5. SAFETY**

**EWB-USA** chapters shall hold paramount the health, safety and welfare of the public in all aspects of their work. This principle is based upon part of the American Society of Civil Engineers (ASCE) code of ethics. The public here refers specifically to the members of the partner community and the chapter members who travel to the community. It also refers to the general public who will use the infrastructure that is implemented in the community. EWB-USA chapters comply with this principle by following the project process and completing and adhering to health and safety plans for each trip.



#### 6. EXPERTISE

**EWB-USA** chapters shall perform services only in their areas of expertise. This principle is based upon part of the American Society of Civil Engineers (ASCE) code of ethics. This principle is implemented through the EWB-USA requirements for project men-

tors. Professional chapters must have a technical lead that meets the established mentor requirements. Student chapters must have at least one (and preferably more than one) professional mentor to lead all stages of the program - assessment, analysis, design, implementation and monitoring. These mentors must meet the established professional mentor requirements. The students and the professional mentor meet together on a regular basis throughout all phases of the project. Technical leads/professional mentors must travel on every assessment, implementation or monitoring trip.



#### 7. APPROPRIATENESS

**EWB-USA** chapters partner with communities to implement proven infrastructure technologies that are appropriate for the community. EWB-USA programs implement technologies that are determined to be the most appropriate solution for a community's

identified problem. This solution is almost always a proven technology with a long term record of success. EWB-USA does not develop new technologies unless there is no existing technology that will adequately address the needs of the partner community. In this case, the technology developed is deemed appropriate for that community. However, it is not assumed that the technology can be scaled up to other communities without thorough community needs assessments conducted.

#### 8. SUSTAINABILITY

**EWB-USA** chapters partner with communities to implement infrastructure technologies that are sustainable by the community. The chapter must work with the community to implement facilities that can be sustained by the community in the long term. The community must have the financial, administrative, technical, labor and material resources available to operate and maintain the installed facilities on a long term basis without outside assistance. The long term operation and maintenance of the installed facilities is an essential part of the design of the project and should be fully developed prior to the start of any implementation activities. Program sustainability also includes environmental and social sustainability of programs.



#### 9. PARTNERS

**EWB-USA** chapters will have an in-country partner organization that assists with the non-engineering aspects of the program. EWB-USA chapters recognize that their expertise lies in the engineering aspects of development work. Chapters rely on in-country partners to provide the cultural competency that is required for each program. The in-country partners are usually locally based non-governmental organizations (NGOs), however other locally-based organizations or governments also serve in this capacity. The partnering organization often provides other services such as translation, transportation and other logistics and educational training to complement the technical training associated with the implemented facilities. Chapters should not use non-local NGOs or Peace Corps Volunteers as their only partner.

#### 10. EDUCATION

Education is an important part of the EWB-USA approach to development work. EWB-

USA maintains that education of the partnering community and education of our members is key to the success of our infrastructure projects. While the education of student chapter members is an important part of the EWB-USA approach to development work, it can only be realized if the service to the community is of paramount importance in all aspects of the program. Without providing the community training on the technology and how to maintain it, the project will fail. Additionally, the EWB-USA model is structured such that by following the project process through completion of a program, the students involved will gain invaluable, practical experience in their chosen engineering field of study.