

Bridges to Prosperity

Changing the world, one bridge at a time

In a season where our thought is destined to the ones that have almost nothing, many of us, however, pass to action, believing in a better world. In the field of Civil Engineering, there are also examples on this. Bridges to Prosperity builds and rebuilds footbridges in developing countries – because developing the accessibilities improves life conditions and local economy. Ethiopia, Nepal, Indonesia and Peru already have their “bridges” to prosperity.

It was in March 2001 that Ken Frantz saw, in “National Geographic”, a photograph of Nevada Wier where one man was trying, suspended by a rope, to cross the abyss between the two sides of an old Ethiopian bridge. Being in the construction world and passionate about bridges, Franz thought immediately that he would have to make something about it. With his family and some friends help, Bridges to Prosperity was created, a private organization that constructs and reconstructs footbridges in developing countries. As the name indicates, Bridges to Prosperity has the objective to encourage poor to increase their conditions of life, improving accessibilities. Because knowledge and ideas are the most powerful things one can share, the basis concept is the methodology “Community Bridge Building”, which means taking the local populations to actively participate in the construction. The reason of this initiative is simple: bridges make the crossing of geographic barriers possible, allowing, therefore, the access to schools, hospitals, and markets. In developing countries this kind of structures are usually constructed with means of organizations such as the World Bank, but in majority of cases these organizations do not concern with the true problems of the populations. Without electricity, schools, deep wells, or health centers, the priority for many is a footbridge.

Bridge to bridge, step by step

Constructors, engineers, designers, bankers, lawyers and all dedicated people to the cause, Bridges to Prosperity lives on private or institutional donations. For each donated dollar the founding members add another one, duplicating the donated value. As all the administrative costs are supported by founding members, donations are entirely destined to a project in course. And those that really want to help may always become a voluntary.

Bridges to Prosperity has the following methodology.

Country selection. Of a list of 50 developing countries, is selected the one that appears to have bigger needs. Then, it is implemented a program that searches for damaged bridges in rural areas. This research is made under some aspects: Are people isolated without access to markets, schools, medical care and services? Are they willing to participate in the construction process? Has the necessity of bridges reached a critical situation? Is there already a program in the country? Are the private and public sectors committed in this search?

Preparation. Once the country is selected, there is a period of two years during which Bridges to Prosperity tries to create public conscience for the problem; as well as training technician and population so that they obtain knowledge to be able to manage the program; and construct five to eight bridges. On the other hand, having in account the economic situation of the majority of these countries, Bridges to Prosperity uses elementary technology in all projects, many times local materials, which eases future maintenance.

Moreover, institutionalize technology and method in both public, educational, and private sectors, and partner with organizations or governmental institutions, capable to managing projects in the end of this two years period.

Bridge Selection. The selection of the bridge passes by some criteria. First, it is necessary to inquire if the local community is willing to participate actively, namely with materials or labor. Technical viability is also important, for example if the field is appropriate. Finally, it becomes essential to get a sponsorship.

Collaboration agreement. After partners reached an agreement, roles and responsibilities are defined. It is important that communities and government realize the need of commitment, mobilization and management, in order to efficiently and effectively manage future projects, such as schools, roads, and clinics.

Construction. Beyond the normal proceedings of any project, it is given training to User's Committee (a group of about seven people elected locally, which is responsible for the preservation of the commitment and motivation of society). Other items are also analyzed, such as local resources, the need of purchasing material, among others.

Delivery. Believing that when the local community participates in the construction it is generated sense of ownership, Bridges to Prosperity "hands over" the bridge to its beneficiaries by means of a document certified by the organization and the local government.

Maintenance. Being of the responsibility of the community beneficiary, the maintenance is attributed to a committee, who receives a basic manual of maintenance. The Bridges to Prosperity makes, generally, one inspection one year after the conclusion, when it is also done a socio-economic impact study.

The first two years, and from the third in ahead. If during an initial period of two years the program transfers methods and technologies to local institutions, in the beginning of the third year it evolves into a training program of technical institutes, where the constructed bridges become practical examples. The bridges constructed after this date must respect the same parameters and serve same intentions. The people who had participated in first project must be capable to manage the program under the support of the partners, which, in turn, assume the program while the Bridges to Prosperity follows for new projects in other countries.

"Sebara Dildi ", the broken bridge

The first project of this organization was the Second Portuguese Bridge in the Blue Nile river, the bridge that Frantz saw in the pages of the magazine. Located in Amhara, Ethiopia, and at 41 km distance of the next road or city, the bridge has about 360 years. In its construction were used materials such as rock, sand, and eggs (that acted as an adhesive element). It is believed to

having been raised by descendants of Portuguese soldiers who had been invited by the regent to stop Muslim advance in the area. Because each of the bridge's approaches end up against a cliff, it was built solely as a pedestrian/donkey crossing. The first intervention the bridge has suffered was in 1908 by emperor Menelik II. Later, in the Second World War, the main arc was destroyed by Ethiopian troops to hinder invasion of Italian forces. Until February 2002, it was never rehabilitated, except small interventions with wood and mud. However, local habitants – that called the bridge "Sebara Dildi", the broken bridge – had never stopped using it, because that would imply 150 extra kilometers. Yet, to cross it people had to be tied to a rope that was pulled by six men on each side. This operation implied the payment of a tax. Small animals were carried upside-down, with their legs tied, while larger animals could not cross. The rehabilitation of the 64 meters bridge followed the traditional methods, using basaltic rock and lime to strength the centre pier, seriously affected by erosion. In the centre, the 12 meters gap was completed with a light weight fixed truss steel. All equipment necessary, metal and cement was carried by 350 donkeys. During the operation the organization kept a small clinic working; supposed to treat people involved in the construction ended up treating locals. This project involved about four Bridges to Prosperity volunteers, more than 300 volunteers and Ethiopian workers. About 1000 people attended the inauguration, with their speeches, celebrations, and dances.

For prosperity

Until now, Bridges to Prosperity has undertaken fourteen projects in Ethiopia, three in Peru, two in Nepal, and one in Indonesia. Recently, a permanent office has opened in Ethiopia, to coordinate operations in all Africa. The projects are often done in collaboration with international organizations like Rotary International, Helvetas, or Christian Children's Fund. Currently, the program teaches local populations to build about six bridges per year. Yet, the primary purpose is to teach, so that populations can be able to carry their own projects in the future. According to Bridges to Prosperity, it is about changing mentalities, about showing that something can be done to change life conditions. For that reason, their slogan is "changing the world one bridge at a time".