

## [Change Agent](#)

# In rural Cambodia, water pumps help farmers help themselves

Paula Shirk, founder of Brooklyn Bridge to Cambodia, tells of a grass-roots approach to helping poor farmers irrigate their fields.



(Courtesy of Dowser.org)

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Lack of access to water is a crucial roadblock in the path from poverty to wealth for many rural societies. Without irrigation techniques, farmers must rely on rainfall that may only come a few times a year.

[Brooklyn Bridge to Cambodia](#) (bb2c) works in a poor rural region in Cambodia, where farmers rely on rain or the arduous and inefficient process of hauling buckets of water in order to produce crops. Bb2c is selling pumps made by [Kickstart](#) that gather water 21 feet down. But furthermore, bb2c is motivated by a grassroots approach to poverty-alleviation that strives to put the tools for development into the hands of the people who will use them to benefit themselves.

### **Dowser: How did you determine the need for the water pumps, and why Cambodia?**

Paula Shirk, founder: I have an adopted boy from Cambodia and when I went to pick him up I was given a picture of his birth family. Over a year and a half I located his family. They were homeless and had no food. And I never gave them money but instead I gave them tools. I gave them a motor scooter so they could get their fish and vegetables home from the market. Then I gave them a cow. The family never asked for anything, but they really used these tools to get on their feet.

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Once you help a family, you're sort of into helping the village. I had to do a 37-page application with [Heifer International](#) and they

turned me down, and told me to resubmit. But then I heard a Podcast that was talking about this guy [Paul Polak](#) [who wrote the book *Out of Poverty*]. The Podcast said two really important things: one is that to get out of poverty you need access to water. The other is that the local people have to be in charge of their own development.

Why did that resonate so much? I'm from a farm and my heritage is Mennonite, which focuses on self-sufficiency.

**How is the pump an innovative solution to farmers' water needs?**

The pumps can irrigate an acre and a half. Before, the farmers could only raise the crops once a season, during the rainy season. Now they can raise two sets of crops. Vegetables are so scarce in Cambodia and they have to import them.

**What was the process like of deciding on the price point and figuring out distribution?**

We sell the pumps at because we don't want to create dependency. And if you give them away, how do you decide who to give them to?

A lot of the process is common sense. We buy the pumps from [Kickstart International](#), who sells these pumps in [Africa](#). We're the first people to take these pumps out of Africa, and I don't get why because it's such a simple solution.

We matched Kickstart's price, even though we have greater overhead. But we can't sell them for more than \$95. So we run on a shoestring budget and we rely on donations to cover our overhead costs.

In terms of distribution, we went into a Muslim area for two reasons. One is that they had the soil and the water table that the pumps require. But also, no one else was going to help them. [Former Cambodian dictator] [Pol Pot](#) tried to wipe them out, and I think it's still the policy of the government to do this.

We just got the shipment in, in March. We've sold about 20 and we've ordered another shipment.

**What is something concrete you've been learning or challenged by as you're starting this organization?**

We're building our own pump, because we can't continue to sell the Kickstart pump. We have Cambodian engineers on staff and [University of Wisconsin](#) engineers on standby. But we really want the Cambodian engineers to do it. The Kickstart pump was made in the West, but the Cambodians should do it their own way, using local materials. Steel is expensive and the Kickstart pump has a lot of steel in it. We're up to our third prototype now.

**What happens if the pumps break?**

The pump is a simple 2-piston treadle and it works by gravity. The pumps last for years. The replacement parts are really cheap.

**There are a lot of people and organizations working on water issues, using a variety of approaches. What would be the benefits of sharing information or collaborating?**

I know our team over there talks to a lot of NGOs. Kickstart is certainly helpful; we like working with them although it's too costly. But a lot of groups are building wells, which is not the same as these pumps, which create a sense of individual ownership. And if the community owns it, nobody owns it. We're really into this ownership, so in that sense our approach is different. But I hope that we, social entrepreneurs, can work together to develop these pumps.

**What other issues do you see contributing to rural poverty in Cambodia?**

Soil erosion, and trees being cut down for fuel. But we are focusing on this pump and later we'll tackle the other issues. And one other topic here is that we want to help women. 65 percent of households are headed by women, but they are barely visible. So that's on my mind too.

*Interview has been edited and condensed.*

*This interview first appeared at [Dowser.org](#).*