



# Finding Myself in the Developing World

By Brenda Birrell

I went for a dental cleaning in 2017. My life has never been the same.

A single paragraph in a magazine in the waiting room caught my eye. It said that more than 20 million girls in the developing world drop out of school every year because



they have no way to deal with their period. It hit me like a meteor: out of nowhere and devastating.

All my life I had lived a comfortable middle-class life. I had grown up in England and graduated from Cambridge University before becoming a high school physics teacher. A few years later I came to the U.S to join the computer industry.

To me, people in the developing world were abstractions. I knew them only as photos from National Geographic: remote, exotic, a different color. Suddenly, it hit me that they were real human beings, girls like I had once been, surely with aspirations I had once held, and having to deal with menstruation, like I once had.

Only they had no way to actually deal with it. I felt a crushing sadness, a lost empathy, and a sense of crisis, all at the same time. I went home and began researching the matter.

The 20 million dropout figure turned out to be one of the lower estimates. Some agencies put the number as high as 50 million. It was staggering, a loss of human potential unlike anything I could imagine. And it was happening every year.

Worse, when a 12- or 13-year-old girl drops out of school, she has very few choices. She can become a child bride, be sold into the sex trade, become a domestic servant or take a low paying menial job. Whichever she chooses, she will be a second-class citizen for the remainder of her life, and easy prey for unscrupulous men.

It was the most savage injustice I had ever imagined, that tens of millions of girls would never be able to realize their human potential. It felt all the more horrible because I was conscious of the many blessings I had grown up with, especially education.

Around this time, I was visiting South Africa as a volunteer for a nonprofit, The Global Uplift Project (TGUP). We were building a center for disabled children in a poor township near Johannesburg. I asked our partners there if this issue of girls dropping out of school because they couldn't manage their period was a problem in their area. It turned out that it was a major problem.



Single use pads like we use in the U.S. are beyond the reach of people living on \$2 a day. So, girls sit on dry leaves, corn husks, dried cow dung — anything that can absorb the flow. As gruesome as these solutions are, they don't keep the girls in school, so they continue to miss a week a month.

I didn't realize that reusable sanitary supplies existed, but somebody told me about them. I looked online, trying to find a solution for the girls, and found about 20 different kinds. They cost about \$25 a set, vastly beyond the means of most girls in the developing world.

About this time, a friend commented that I was becoming a "social activist." I was taken aback. I had always been a quiet, demure person who went out of her way not to make waves. But she was right. This was all I thought about, all I talked about.



Frustrated with my own impotence and angry at the injustice of 20+ million girls not being able to go to school — and every year, at that — I finally decided to do something about it.

When my husband was in graduate school, I made all of his (and my) clothes on a treadle sewing machine, the kind you pump with your feet. I got out my machine and sewing supplies and set to work. In a

day or two, I designed what I thought might be a solution.

It was a cloth panty liner that would fit into the underwear. Into the panty liner, a girl could insert a removable, washable, absorbent pad made of pajama fabric. The pad

could be easily removed and replaced with another pad, and another, and another, and all washed any number of times.

It was simple but most of all, it was functional. And it was cheap. There wasn't even three dollars of cloth in the whole of the kit that contained eight of the removable pads. I shared it with people I had met on the ground in South Africa and asked them what they thought. They loved it!

I made prototypes that we shared and tested with many young women. It's a pretty intimate thing, but half of humanity has to deal with it, so the ladies were receptive, and responsive. Besides, they didn't have any better solution at hand and if this one worked it would be a godsend.

After a few months and dozens of test kits and feedback and adjustments, we arrived at what we thought was a good design. It was compact, comfortable, reusable, and discreet. Now the hard part began.

What would it cost to make the kits in volume? After all, the goal was to help all of those 20+ million girls who wanted to go to school but needed a solution for their period to be able to do so.



Now I had to really become not just the social activist my friend had described, but a social entrepreneur, someone who actually solved a problem. Not just a dabbler, but a doer. The difference is enormous. The pattern I had developed was essentially an idea — absorption — expressed in cloth. To be an actual solution, it had to be made in high volume, at high quality, and

delivered in an intimate and safe way.

So, I set out to devise the solution, an entire global delivery chain reaching into the developing world. I had to learn a lot of things I'd never known before: industrial design; manufacturing; accounting; distribution. It was wildly improbable, literally laughable, the presumptuousness of it all. But there was no other way it was going to happen. I had to do it.

The TGUP staff began helping me. We simplified the design so it could be made on the most common, inexpensive sewing machines in the world, the kind that are used in many parts of Africa. The materials were dress fabric on the outsides of the panty liner, and an inner layer of what was essentially umbrella fabric to keep it waterproof. Pajama fabric was used for the absorbent pads.

After days of work in what I didn't know was called "cost accounting," we realized that we could make a durable, washable, reusable, sanitary kit that would last for three years. And we could do it for about \$6.

We were over the moon! It was one quarter the cost of comparable commercial products. Best of all, it would be within reach of the poorest girls in the world.

Even better, we were going to employ dozens of women in the developing world to make the kits. We would provide high-paying, dignified jobs where they could give back to their own communities in a way that they'd never been able to before. For many, it would be the first paying job they have ever had. It was one of the high points of my life.

I had fretted and bothered and noodled this thing for the better part of a year. I had made myself learn skills I had never imagined I would tackle; in fields I had never even known existed. I had worked with amazingly good people in multiple countries, in all manner of disciplines, all devoted to the idea that if we could help adolescent girls stay in school, the world would be a better place.

I wasn't worn down or even daunted by it. In fact, as we worked through each issue, I became more and more energized. I worked on the implicit assumption that it was *going* to work, and that we *would* devise a solution that would enable us to help millions of girls. We had to. And we did.



I worked with TGUP partners in Kenya and Nepal to set up sewing centers that would make the kits. I traveled to Kenya to train the seamstresses. We created design patterns, bills of materials, assembly instructions, quality control procedures, financial models, and training tools. All were needed to manage a global production process that could make kits locally, in high volume, at high quality, and at low cost.

Today, we have made and distributed more than 20,000 kits to girls in South Africa, Zambia, Kenya, Ivory Coast, Tanzania, and Nepal. We're opening sewing centers soon in Uganda and Mozambique. The need is enormous, and eternal.

We call the project "Save a Girl," because that's what it does. The kits are funded by TGUP donors and are given free to the girls. When properly cared for, a kit will last for three years, or longer. That's usually long enough for the girls to be able to finish school, which is all we ever wanted.

I shy from hyperbole, but at \$6 per kit, or \$2 per girl per year, this has to be one of the highest returns on human investment in the world. It is certainly one of the most personal, and humane.

It's been especially meaningful because I know how much I have been blessed by having had access to education. In every girl we help, I see a little something of a younger me.

UNICEF says that investment in young women is the best way to improve the lot of the developing world. You can understand why. They are the ones who are going to have their hand on the cradle. As a mother of two girls, this made it all the more poignant.

I've come to realize that this is not simply a developing world problem, or even just a



female problem. It is a human problem and humanity is like a boat in the water: when any part of it is lifted up, it's all lifted up. That is us, in the boat. We are all lifted up when we help others.

Looking back, I realize I really found myself in the most improbable of places, in the developing world. I've become a fully formed person in my own right, not just an adjunct to my husband. I have my own identity and

purpose in life and am making my own mark on the world. It might only be a small mark, but it is mine and I think it will endure, maybe even grow.

There's a saying I remember from some old school of wisdom: "Only that day dawns to which we are awake." I didn't know back in 2017 in the dentist's office that I was awake to the dawn of a new day, but I must have been. It's going to be a glorious day.

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### **Author's Biography:**

After graduating from Cambridge University, UK, Brenda taught High School Physics. A few years later, she and her husband moved to California's Silicon Valley where she raised two daughters. She returned to the education field in 2001 and retired in 2017 so that she could volunteer full time for The Global Uplift Project and help tens of thousands of children in the developing world every year, instead of hundreds of children in the US.