The Power of Global Action Projects: One Student's Journey

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By guest blogger Karishma Bhagani

The world suffers from a plethora of natural and manmade disasters. From destructive floods to violent conflicts, society is faced with complex global challenges that can only be solved through collaboration. Politicians and the media often focus on short-term collaboration for discreet goals, such as electing a specific politician or encouraging donations to a specific relief effort. I believe we must consider the long-term implications of our actions, not only within the context of our immediate environment, but also for the larger global community.

In my home country, Kenya, 17 million people do not have access to clean drinking water. This leads to many health problems, and I was particularly inspired to tackle this problem due to the fluctuating weather problems; half the country was drought-stricken, and the other half had a rampant increase in water-borne diseases due to flooding. So, while I was attending the Aga Khan Academy in Mombasa, Kenya, I created a cost-effective water purifier made from traditional elements, such as sand, gravel, charcoal, cotton cloth, and moringa oleifera, which is a local plant known for its natural antioxidants and its drought-resistant properties. On average, the purification unit can purify 5 liters of water in 30 minutes and costs less than $20 to create. The unit has enough materials to purify water for approximately 18 months of daily use by an average family of five people. In order to ensure that the purified water is potable according to the World Health Organization standards for clean water, a test was carried out at the Coast Water Services Board (CWSB) in Kenya. The initiative is called *Matone de Chiwit,* which means "drops of life" in the languages from the continents in the world that suffer most from water scarcity: Africa (Kiswahili), Latin America (Spanish), and Asia (Thai), respectively.

Despite the eventual success of the project, the journey was filled with many challenges and obstacles, ranging from the creation of a successful working product to gaining donations for the execution of the pilot project in

Mombasa. During the process of creating the filtration unit, I experimented with multiple elements and ended up failing many times throughout the process. In theory, all the elements of purification that I had researched, including the use of galvanized and stained steel, should have been successful in cleaning the source water. However, during the experimentation process, I realized that the theoretical research did not always apply in practice, hence alternative solutions are important to test as well. Failure often results in demotivation; however, analyzing the causes of the problem and keeping a positive mindset will, in turn, provide an opportunity to grow into a better venture. The failure of my product motivated me to do better.

I was fortunate to have the continuous support of my parents throughout the process, and my academic supervisor, who provided me with guidance and insight into the entire process, also created a form of moral support, particularly when the project did not take the planned trajectory. It was through their support that I was able to gain access to more connections in the water industry and potential sponsors to help expand my project. It is with the support of these individuals that I remain motivated to continue to expand, and I am currently establishing a team of youths at my high school and at my university in preparation for large-scale expansion.

Matone de Chiwit has evolved into a social enterprise that tries to solve the global problem of access to clean water. This past year, I piloted the water purifier in the Matupeni Community in Mombasa with help from Davis & Shirtliff, one of East Africa's largest suppliers of water-related goods. Twenty units were donated to residents of the village. Following the success of the pilot, I am in the process of getting a patent for the water purifier with the intention of distributing these units with African company sponsorship to other communities in Mombasa and around Kenya.

The 20 units that were created for the pilot donation at the Matupeni Community in Mombasa.

In the future, I plan to expand the project to other developing countries. I believe that *Matone de Chiwit* has the potential to serve the larger global community. As a global citizen, I believe that I have a responsibility help populations in developing countries gain access to clean water. True leadership means embracing our global community and taking action to make life better for others.

How are you going help the world as a global citizen?

Top photo of the author by Deval Devani.

Pilot photo courtesy of the author.