**Team Name: Bigfoot** 

School: Koforidua Technical University

## **Introduction: Inspiration from the Earthshot Prize**

The Earthshot Prize has become one of the most inspiring global movements of our time. Founded by Prince William, it aims to identify and scale groundbreaking environmental solutions that can restore the planet. Each year, the Prize recognizes innovators tackling the world's greatest environmental challenges across five key areas: Protect and Restore Nature, Clean Our Air, Revive Our Oceans, Build a Waste-Free World, and Fix Our Climate.

When I explored the 2025 Earthshot Prize finalists, I was deeply moved by the work of organizations like ATRenew from China, which manages electronic waste by promoting reuse and circular economy models, and Lagos Fashion Week from Nigeria, which is revolutionizing the African fashion industry by advocating for sustainable design and waste reduction. Their creativity, collaboration, and measurable impact opened my eyes to what's possible when young innovators take action.

In Ghana, I saw a similar challenge an enormous amount of waste generated daily from coconut husks discarded across markets, beaches, and streets. These husks are often burned or dumped, releasing methane and carbon dioxide into the atmosphere. It was painful to realize that what many saw as useless waste was actually a potential resource. We decided to take action. That is how my team and I founded BigFoot Sole Mate Limited, a youth-led initiative that transforms coconut waste into eco-friendly footwear components while creating local jobs and raising environmental awareness.

## **Understanding the Issue**

Coconut is one of Ghana's most widely used crops, with thousands of coconuts consumed daily for food, drinks, and cosmetic uses. However, the husks which make up more than half the fruit are rarely utilized. Across coastal regions such as Takoradi, Cape Coast, and Accra, heaps of coconut waste line roadsides and beaches. When burned, they emit harmful gases; when dumped, they clog drains and become breeding grounds for pests.

At the same time, Ghana's footwear and fashion industries rely heavily on imported materials like cork and rubber, which are costly and often environmentally damaging to produce. Local shoemakers struggle to access sustainable, affordable footbeds, limiting their ability to grow their businesses. This situation presented both a problem and an opportunity: how could we turn local waste into something of value that benefits both people and the planet?

## The BigFoot Solution

BigFoot Ghana was born out of this question. Our idea is simple but powerful to turn coconut husks into eco-friendly soles for footwear. Through a process of collecting, drying, grinding, binding, and molding, we convert discarded coconut waste into strong, flexible, and durable footbeds for shoemakers. Each ton of coconut husk recycled prevents 58 kilograms of CO<sub>2</sub> and methane emissions from entering the atmosphere. BigFoot does more than just recycle waste. It supports local artisans, empowers youth with green skills, and promotes sustainable production in Ghana's fashion sector. The project is entirely youth-led, combining technical innovation, environmental awareness, and entrepreneurship.

## **Expanding the Impact: SoleCycle**

To extend BigFoot's reach beyond production, we will create SoleCycle Ghana, a youth-driven campaign and training movement inspired by the Earthshot approach to measurable community impact. Through SoleCycle Ghana, we aim to engage young people, students, and artisans across the country in building a circular economy where waste becomes a resource.

The campaign involves setting up community waste collection hubs in key regions like Koforidua, and Accra, where coconut vendors and farmers can drop off husks in exchange for small payments or product discounts. These husks are then transported to BigFoot's processing center for recycling. At the same time, training sessions and innovation workshops are organized in technical universities to teach youth how to process, mold, and design sustainable footwear components.

#### Partnerships and Collaboration

BigFoot thrives on collaboration and the spirit of teamwork across sectors. The project currently connects students, artisans, coconut sellers, and local footwear makers in a shared mission to reduce waste and create sustainable, locally made products. Our core team is made up of passionate youth innovators from Koforidua Technical University, who lead design, production, and community outreach.

We source coconut husks within Koforidua and surrounding areas, working directly with coconut vendors and small-scale farmers to collect discarded materials that would otherwise end up as waste. In addition, we collaborate with local shoemakers who use our recycled soles in their footwear production. As BigFoot grows, we are strengthening relationships with entrepreneurship hubs such as Innohub and other community partners to expand our recycling network and youth training initiatives.

# The Change We Want to See

Through BigFoot, we aim to inspire a regional transformation in how waste is perceived and managed. We want Ghanaians and West Africans to see waste not as a problem but as an opportunity for innovation, creativity, and employment. Our vision is to build a waste-free and circular fashion economy one where youth drive solutions that address both environmental and economic challenges. By reimagining discarded materials as valuable inputs, we are promoting a mindset of responsibility and sustainable living.

#### What Success Looks Like

Success for BigFoot will be visible, measurable, and deeply transformative. In the short term, success means establishing a fully functional coconut waste collection and recycling system within Koforidua and nearby communities. It includes recycling at least five tons of coconut husks annually, training over 200 young people in sustainable product design and green manufacturing, and supporting local shoemakers to produce affordable, eco-friendly footwear that consumers are proud to wear.

In the medium term, success will look like a Ghana where eco-footwear becomes a common choice, where youth view green innovation as a viable career, and where communities take ownership of their waste management systems through recycling and creative reuse.

By 2028, BigFoot aims to create 200 direct jobs through production, training, and logistics, and an additional 300 indirect jobs through partnerships with coconut vendors, farmers, and local shoemakers. This will strengthen local economies while promoting environmental responsibility.

Beyond 2028, BigFoot's vision is to expand across Africa, bringing its circular innovation model to other countries facing similar waste challenges. True success will be when BigFoot stands as a leading example of how African youth can transform waste into opportunity, driving the continent toward **a** cleaner, greener, and more resilient future.

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