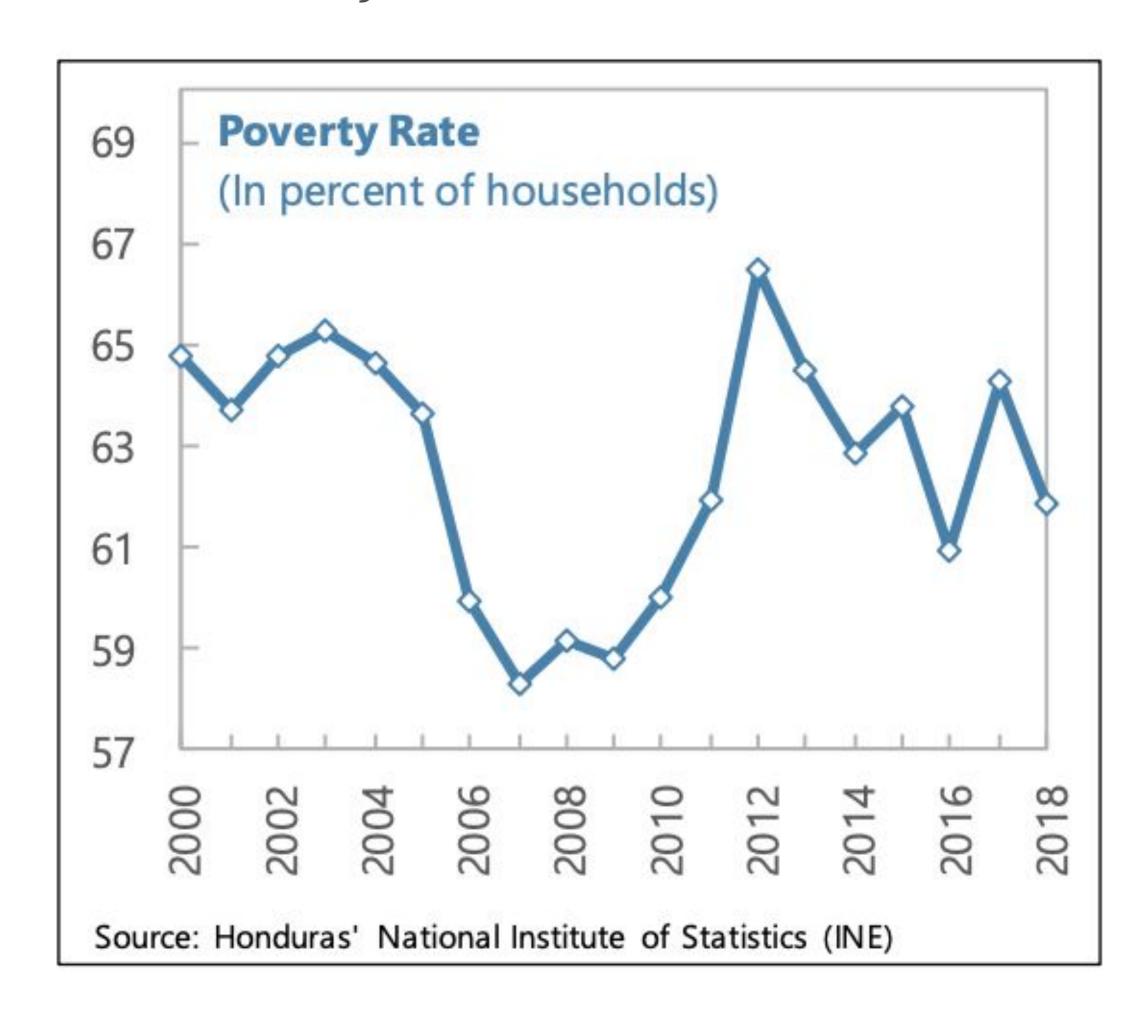


UNiV: Universal Footwear for All Honors Capstone - Junny Choi (Faculty Advisor: Professor Yili Liu)

Problem

There are millions of people living in extreme poverty throughout the country of Honduras.

- In rural areas, about 1 out of 5 Hondurans live in extreme poverty, where they would earn less than \$1.60 per day.
- Honduras' average temperature ranges from 76°F to 84°F.
- Many people who live in extreme poverty don't have access to basic necessities, such as water, food, electricity, and more.



What is UNiV?

UNiV is a shoe made with sustainable and durable materials that is specifically designed to withstand extreme temperatures, surfaces, and conditions. Its purpose is to help the people in need in Honduras and provide them with a footwear that ensures comfortability and safety.

Design

UNiV is made of 100% recyclable materials where almost 70% of the shoe is made of rubber using recycled car tires (butadiene rubber and styrene butadiene rubber).

Why Rubber?

- → Can withstand extreme temperatures (up to 572°F!)
- → Rubber soles prevent slipping and falling
- → Able to absorb shock
- → Durable, lightweight, comfortable, and breathable

Funds?

charitable

→ Donations (mainly



Multipurpose use:

All sizes

available for kids

and adults

Validation

- → Designed final model with Solidworks
- → Presented initial design to a local Honduran active wear brand (DUBEAR)
 - Made slight adjustments to meet criteria
- → Design approved and ready for production (planned for summer 2022)





Future Work

- → Visiting Honduras mid-May to launch and finalize production details with DUBEAR
- → Scheduled to meet with 3 local charitable organizations in June to distribute the product and get funding/donations
- ◆ RAISE AWARENESS!
- → Meeting with a professional designer on July for recommendations and new design ideas
- → Planning to volunteer in medical brigades (summer 2022) in Honduras
- → Expand to Central America (?)