



**The Flipflopi: East African Innovation & Heritage
to Tackle Plastic Pollution**

- 400m ton/a produced
- ~50% of all plastics is **SINGLE USE**
- <14% is being recycled
- Landfilled, burnt, washed up



THE FLIPFLOPI

Innovation, Heritage, Change



Convene, Inspire, Educate, Movements, Influence

THE FLIPFLOPI

EXPEDITIONS



Convene, Inspire, Educate, Movements, Influence



THE FLIPFLOPI

THE CIRCULAR ECONOMY

INTO REMOTE COMMUNITIES: *LAMU, KENYA*



Foreign, Commonwealth
& Development Office



Sustainable Manufacturing and
Environmental Pollution



UNIVERSITY OF
PORTSMOUTH



Northumbria
University
NEWCASTLE

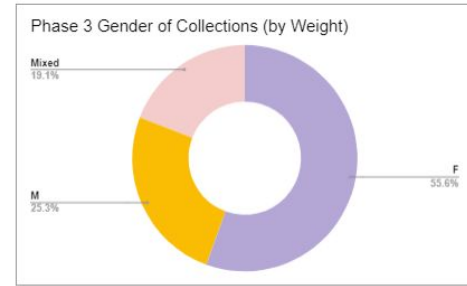
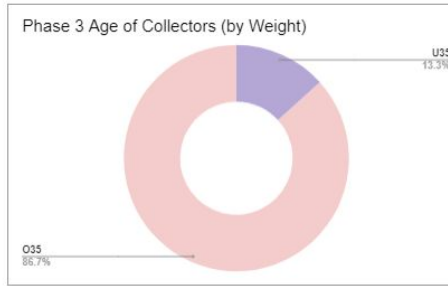
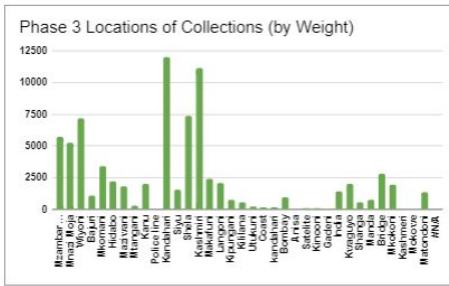
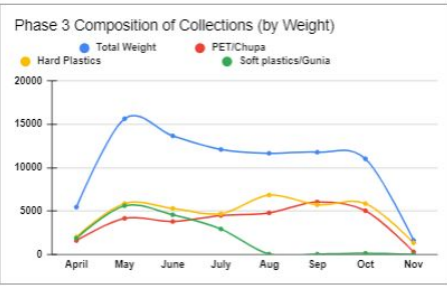
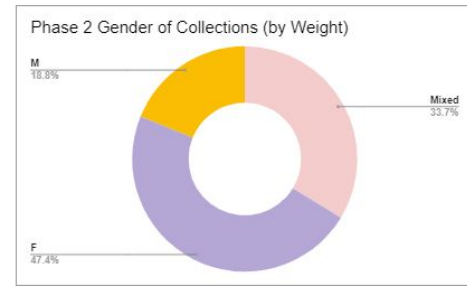
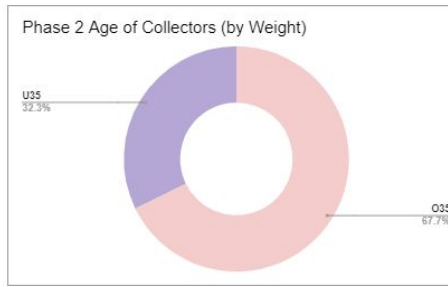
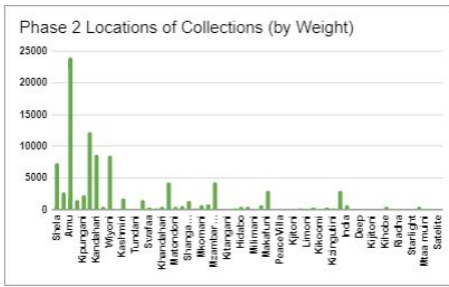
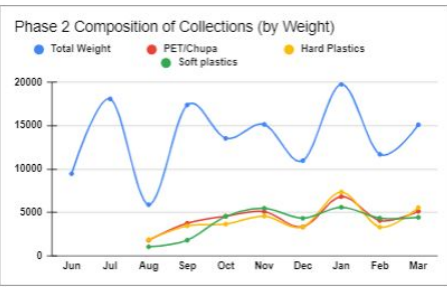


THE FLIPFLOPI

WASTE RECOVERY CENTRE







Community Collections (16 months)

- 220 tonnes collected
- 3 islands + mainland
- Hard Plastic, Soft Plastic, PET
- Largest share of collectors are women
- 22% reduction in recyclable plastics at the landfill
- 50% reduction in solid waste (Municipality)

Challenges

- Infrastructure (roads)
- Logistics (islands)
- Gunias

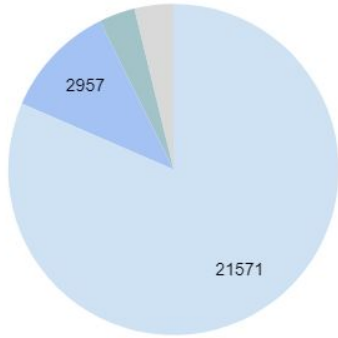


PRODUCTION



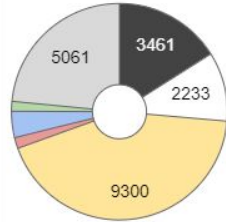


TYPES out (kg)

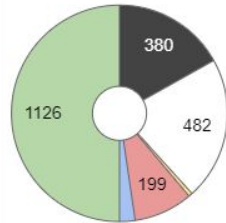


● HDPE ● PP ● GUNIA ● Mix

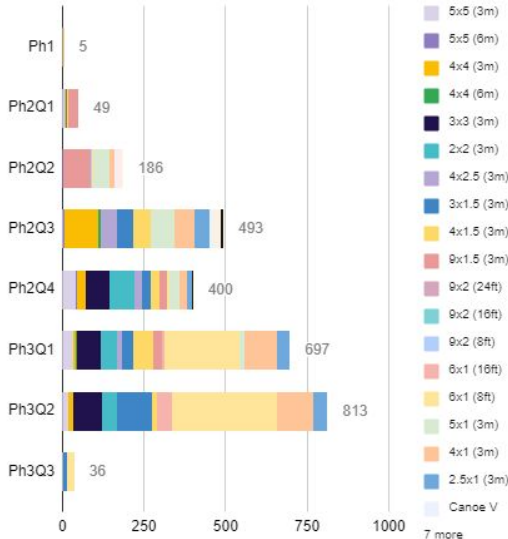
HDPE out (kg)



PP out (kg)

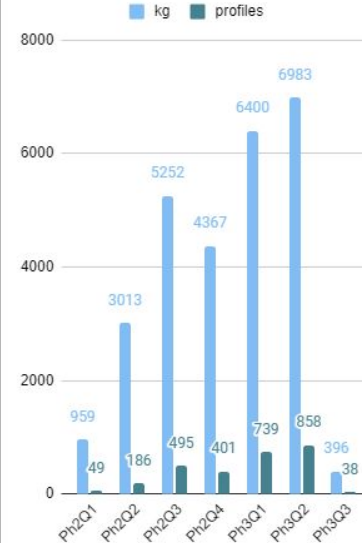


Profiles extruded by Quarters

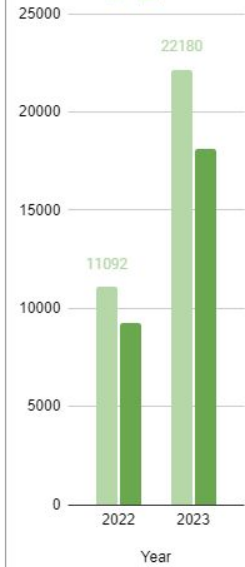


Extrusion output by Quarter

Total kg (out) and number of profiles



In/Out (kg) per year



R&D

- Crusher, extruder, agglomerator
- 1000+ pieces of lumber extruded - HDPE, PP, gunias, mix
- In-house production of moulds, automated washing systems

Challenges

- Poorly designed plastic products - sinking HDPE
- Lack of stable electricity and access to Phase 3 connection



FURNITURE



40+ product lines





Sustainable
Manufacturing and
Environmental
Pollution
Programme

BOATBUILDING





TRAINING

Vocational training college

- Opportunity to get more youth into embracing traditional craftsmanship (high demand, few artisans)
- Circular economy, machinery, craftsmanship
- 30+ students trained
- Training women boat builders & carpenters

Challenges

- Institutional delays
- Identifying a local trainer

THE FUTURE



NDOGO 2.0



KUBWA

ASANTENI SANA :)

