

# Take Taka

at your disposal



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# Today's Presentation

Sanitation in Kibera

The Solution: Take Taka

Testing Take Taka

Viability

Next Steps

# Sanitation- The Context

## WORLD



**2.6 billion people**  
LACK ACCESS TO  
TOILET FACILITIES  
(40% of global  
population)

## KENYA



## KIBERA



- 1 toilet per 2000 people
- BioCenters serve  $\approx$ 2% of population
- 70% use flying toilets

“Lack of sanitation is the world’s biggest cause of infection.” (WSSCC, 2008)

# Sanitation: The Problem



Mary, mother of three



- Hard to access toilet
- BioCenters are spread out and closed at night
- Most pit latrines are full

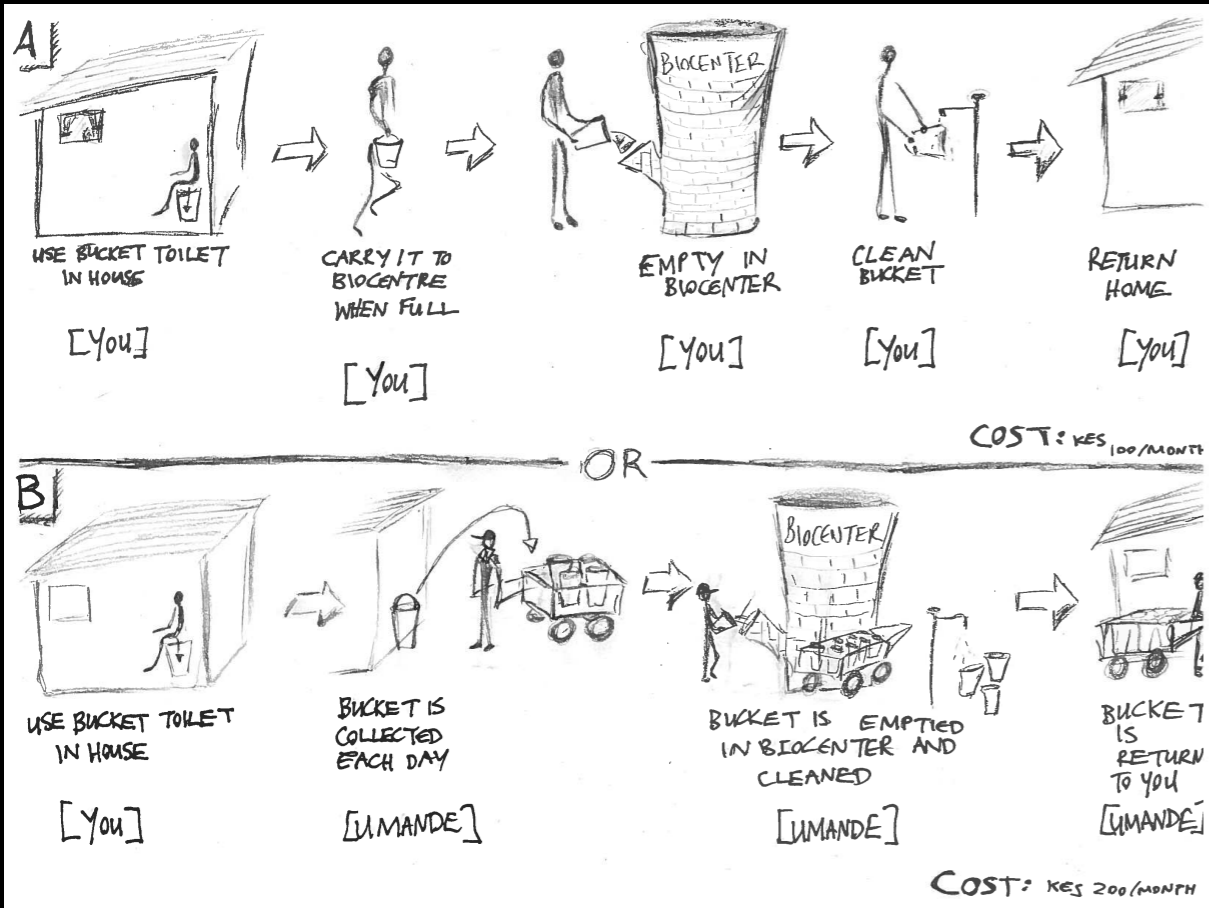
Mary needs an affordable and convenient method of disposing her household's human waste.

# Take Taka Pilot Prototype

[http://prezi.com/cqrr7jry8\\_d\\_/](http://prezi.com/cqrr7jry8_d_/)

# Testing - Desirability

## Do-it-yourself vs pickup



In-home bucket + seat



## Learning

## Adaptation

300KES too high, 200KES widely accepted	Change price to 200KES/month
Option A favored near BioCenters	POV: Focus on target user living >10min away
Majority of women favor pickup service	Verifies user
Fear of leaving bucket outside	Regular morning/evening pickup when people are home
Desire for bucket ownership	2 bucket system
Household size affects desired service frequency	In progress...

# Testing - Viability

## Learning

## Adaptation

### Umande Jitegemee Transport - Job Posting

Umande, together with Oxfam and Stanford University, is piloting a new sanitation project, Jitegemee. We are looking for people that would be interested in a critical job to revolutionize sanitation in Kibera. It would involve transporting the full Jitegemee toilets (pictured below) from nearby homes to this Bio Center. Please write your name and phone number below so that we can contact you.

Umande, pamoja na Oxfam na Chuo Kikuu cha Stanford, ni piloting mpya ya usafi wa mazingira ya mradi, Jitegemee. Sisi ni kutafuta watu kwamba itakuwa nia ya kazimuhimu kwa revolutionize usafi wa mazingira katika Kibera. Ingekuwa kuhusishakusafirisha kamili ya vyoo Jitegemee (pichani chini) kutoka nyumba jirani na hiCenter Bio. Tafadhali andika jina lako na namba ya simu hapa chini ili tuwezekuwasiliana na wewe.



Name	Phone Number

5 signups -- 3 men and 2 women -- in short timeframe

Verified job demand at 1000 KES/week

Protective gear requested by applicants in case of spill

Budget for and provide protective gear (e.g. gloves)

Know the streets of their own neighborhoods and would **feel comfortable** working there despite our initial fears regarding stigma.

Local hiring run by community managers will be important and increase efficiency.

Most applicants already involved in BioCenters

# Testing - Feasibility

## Learning

## Adaptation



Inaccessible Streets

2 person pickup team

Muddy streets with variable conditions

Rugged cart design -- current carts will work

Serve ~48 households per circuit

2 carts per team





Some carts can hold up to twenty 20L Buckets each

Will hold 24 Oxfam-style toilet buckets each



# Implementation Plan

## Long term

Organization	Design stage	Setup stage	Operation stage
<b>Community Groups</b> 	<ul style="list-style-type: none"> <li>Land site identification</li> <li>Operating staff to train</li> </ul>	<ul style="list-style-type: none"> <li>Supply labor for construction</li> <li>Clear land</li> <li>Create organization and hire staff</li> </ul>	<ul style="list-style-type: none"> <li>Run organization day-to-day</li> <li>Maintain infrastructure</li> </ul>
<b>Umande Trust</b> 	<ul style="list-style-type: none"> <li>Design of biodigester</li> <li>Prototype management</li> <li>Project mentorship</li> </ul>	<ul style="list-style-type: none"> <li>Construction experience</li> <li>Management advising</li> <li>Supplies procurement</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing advice</li> <li>Monthly audits</li> </ul>
<b>Take Taka</b> 	<ul style="list-style-type: none"> <li>Run pilot</li> <li>Business functions advice</li> <li>Fundraising</li> <li>Pilot management</li> </ul>	<ul style="list-style-type: none"> <li>Follow-through</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<b>Oxfam</b> 	<ul style="list-style-type: none"> <li>Manufacturing partner for toilets</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

Thank you.

