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PROJECT OVERVIEW AND OPPORTUNITIES FOR FUTURE INVESTMENT & SCALE

19 NOVEMBER 2021

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YLabs:

YLabs (Youth Development Labs) is a leading global design and research organisation working to improve health and economic opportunity for young people 10–24 years old. YLabs currently works in sub-Saharan Africa, South Asia, and Central America designing health programming to address key challenges in sexual/reproductive health, HIV/AIDS, and mental health. Our offices are based in Berkeley, California and Kigali, Rwanda.

YLabs was the lead partner on the project, and was responsible for overseeing the design and pilot implementation process. This work was made possible through the generous support from The Humanitarian Innovation Fund at Elrha

y.labs



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Project Lead



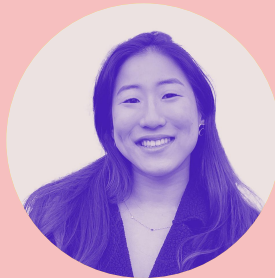
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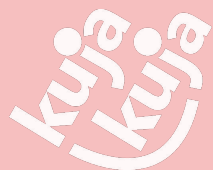
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Kuja Kuja & Alight:

Kuja Kuja is a real-time feedback system that tracks customers' levels of satisfaction with products and services, records their ideas for how those services might be improved, and makes that data freely available for everyone to see and use.

Kuja Kuja's goal is to reorient humanitarian response and project design around the voice of the beneficiary.

Alight is an international nonprofit organisation that works with refugees and migrants globally. In Uganda, Alight is operational across seven refugee settlements in Northern and Southwestern Uganda. Alight Uganda provides a number of services including child protection, mental health and psychosocial support, and legal support for refugees.



Acronyms & Definitions

MHM

Menstrual Hygiene Management

SRH

Sexual and Reproductive Health

WASH

Water, Sanitation and Hygiene

STD

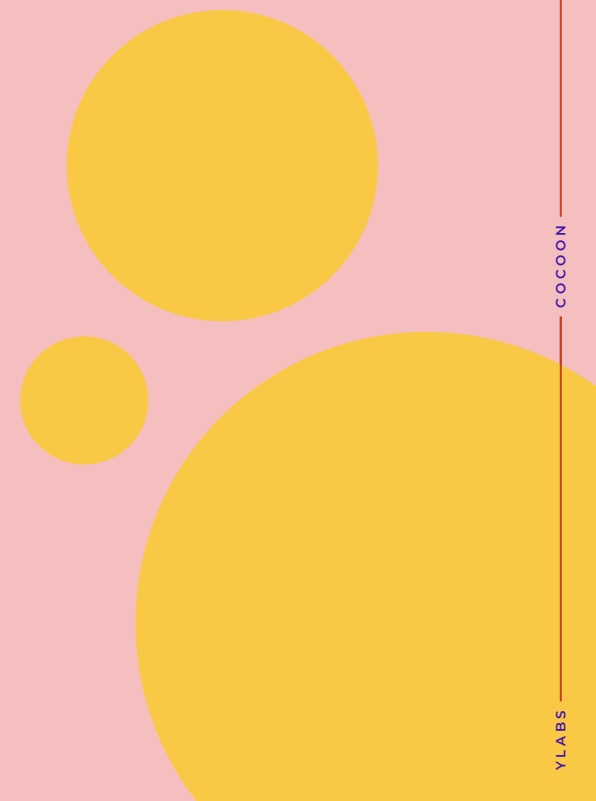
Sexually Transmitted Disease

Software Solutions

Social behavioral interventions

Hardware Solutions

Infrastructure interventions

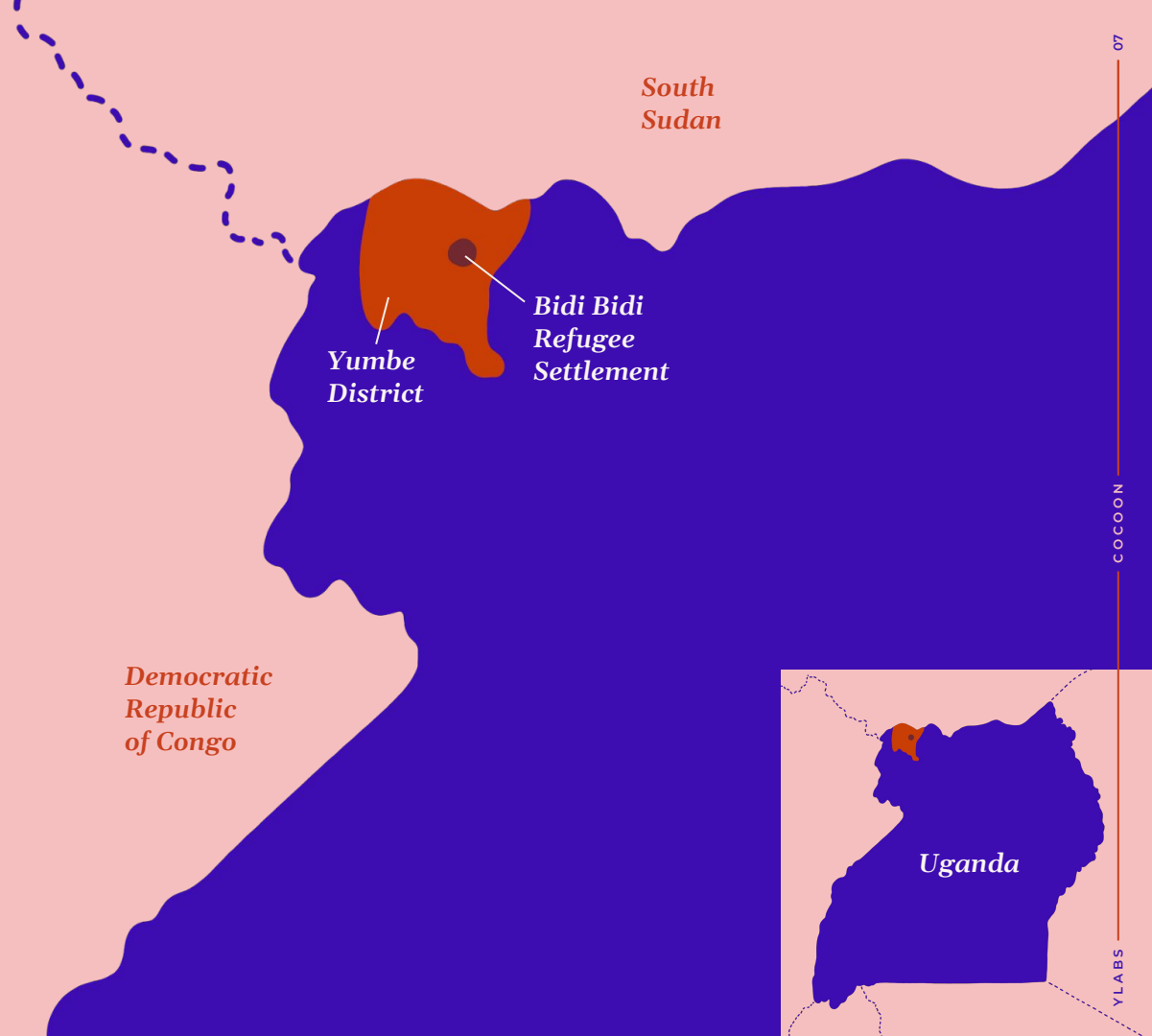




Project Background

Bidi Bidi Refugee Settlement

- The Bidi Bidi Refugee Settlement, located in the west Nile area of Uganda in Yumbe district, was established in 2016 to accommodate the rapid influx of South Sudanese asylum seekers. It is one of the largest refugee settlements in the world, covering 292 square kilometres and divided into five zones (Zone 1-Zone 5).
- Bidi Bidi is currently home to 242,608 refugees, 80% of whom are of South Sudanese descent and became displaced as a result of the South Sudanese Civil War, which began in 2013.
- Our team conducted field research in Zone 5 of the settlement due to the local presence of our implementing partners. The familiarity of community members with Kuja Kuja and Alight was helpful to our team to recruit participants and conduct research.



Limited access to sanitary pads, washing supplies, and safe, private, spaces for menstrual hygiene management (MHM) is a pressing problem for menstruators in humanitarian crises.

Together with young menstruators, we seek to design safe spaces and services for managing menstruation among displaced populations.



The Intervention

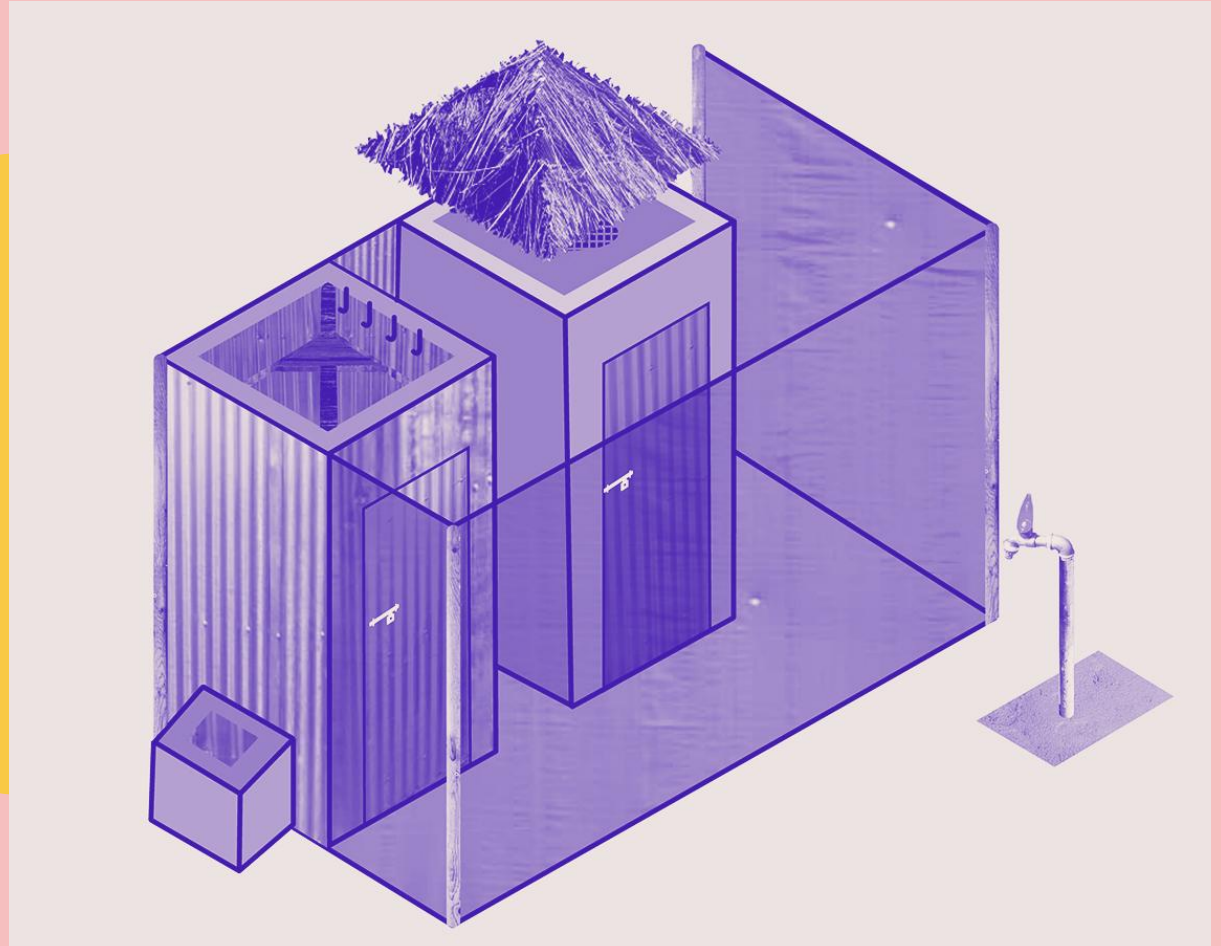


Cocoon Mini

The Cocoon Mini is a semi-permanent latrine and bathing area that is built within household compounds and is accessible to families in the surrounding area. Along with a private latrine, the Mini includes areas for showering and laundering with direct water access.

Mini Features

- The Cocoon Mini features a 1.7 metre privacy wall
- A bath shelter with a 1.7-metre iron sheet wall surrounding the unit
- locking doors on the latrine and bathing areas
- hooks and shelves in the Bath shelter for storing items
- Secured designated disposal areas for sanitary products
- A water access point in the immediate vicinity of the Cocoon Mini's
- Portable solar lights were added to the facility
- 2 Cocoon Mini's were fitted with incinerators



THE COCOON MINI



Location

- Mini sites were more than 100 metres away from a main water source to maximise access for homesteads farther from a water source.
- Mini sites were not constructed in public spaces like churches or the reception desk where refugees are registered.
- Mini sites were located at least 200 metres apart from each other to ensure equitable distribution of sites amongst different homesteads.

Access

- Mini sites were positioned to optimise access for at least 15-20 menstruators.
- Only female-exclusive Mini sites were fitted with incinerators.
- Retrofitted Mini sites that are not female-exclusive were constructed in compounds with latrines in good condition to improve their longevity.

Community

- Mini sites required a consenting compound owner.
- Mini sites with female-only toilets were located in the compound of a respected community member. These members were chosen to ensure the usage policy of the latrine was upheld and the incinerator was adequately maintained.
- Mini sites were constructed only in compounds whose owners are in good standing with the community.

Implementation

Locally sourced materials were used to construct the Mini.

With the aid of local masons and labourers, 20 Cocoon Minis were constructed for public use in Ariwa I and Ariwa II.

Each Cocoon Mini site was built within a homestead's compound, and a supervisor was chosen from each household to maintain the site. Supervisors were briefed on cleaning and maintenance procedures.

The construction of permanent structures in the settlement is discouraged by the Office of the Prime Minister because the goal is for refugees to eventually relocate from the settlement. The Mini was intended to be as safe and sturdy as possible while complying with this standard.





Research Methods

In May 2021, YLabs and Kuja Kuja commenced the **pilot stage** of the Cocoon project with the goal of constructing **20 Cocoon Mini units** in the **Bidi Bidi Refugee Settlement**. Each unit currently serves between **15-20 menstruators**.

9 units were constructed in Ariwa I and 11 in Ariwa II. Two sites are exclusively for menstruators and feature incinerators for product disposal. The Mini served more than 300 people continuously during the 3 month pilot.

Menstruators

- Menstruators included women/girls who had a Mini built within their household compound.
- Our target age range for interview participants was 15-24.
- In total, 109 menstruators were interviewed about their experience using the Cocoon Minis.

Community Members

- The community sample included both women/girls and men/boys who do not have direct access to the Mini within their household compound.
- Interviews were intended to gain an understanding of how the community at large felt about the structures.
- In total, 64 community members were interviewed, of whom 12 identified as male.

Cocoon Mini Supervisors

- Mini supervisors managed the Mini space and included both women and men. They worked directly with the Kuju Kuju team in providing feedback on their experience and sharing any concerns or problems.
- The 20 Mini supervisors (one from each site) were interviewed twice over the pilot period.

Data Collection:

- Interview guides were developed for each group to elicit information about their overall experience using the Mini. Questions included what participants liked and didn't like about the space, the Mini's impact on their lives, and any concerns about its use. Supervisors were also asked further questions about maintaining the Mini space and any challenges they faced.
- Using purposive sampling, structured interviews were conducted in English, Bari, or Juba Arabic by members of the Kuja Kuja team at participants' homes. Precautions against COVID-19 were taken to ensure the safety of all.
- The team obtained written and verbal informed consent (or assent, for minors) from all participants before beginning data collection.



Data Analysis

- Interviews were translated verbatim to English, transcribed, and de-identified before uploading into Google Sheets for data management.
- Transcripts were analysed using a blended approach of deductive and inductive coding thematic analysis to identify and explore patterns of meaning across the interviews.
- Team members met through a series of meetings for further validation, discussion, and consensus of the results.





Key Project Learnings



01 Distributed water access and waste disposal allows for menstruation management on one's own terms

Background

- In order to be confident participating in everyday activities, menstruators repeatedly relayed the importance of managing their hygiene by having water access for bathing and washing menstrual products.
- Menstruators' hygiene practices are severely limited by frequent and long-lasting water shortages.
- The “when”, “where”, and “how” of menstrual product disposal is constantly on the minds of menstruators, in many cases leading to psychological stress and anxiety.
- Menstruators fear discarded products being found and taken to be used for witchcraft. Menstruators believe that their blood can be used to “bewitch” them and make them barren.



**The Mini's
Effect on
Hygiene**

The Cocoon Mini has provided menstruators with the flexibility to bathe more frequently and at more hours of the day or night at their convenience.

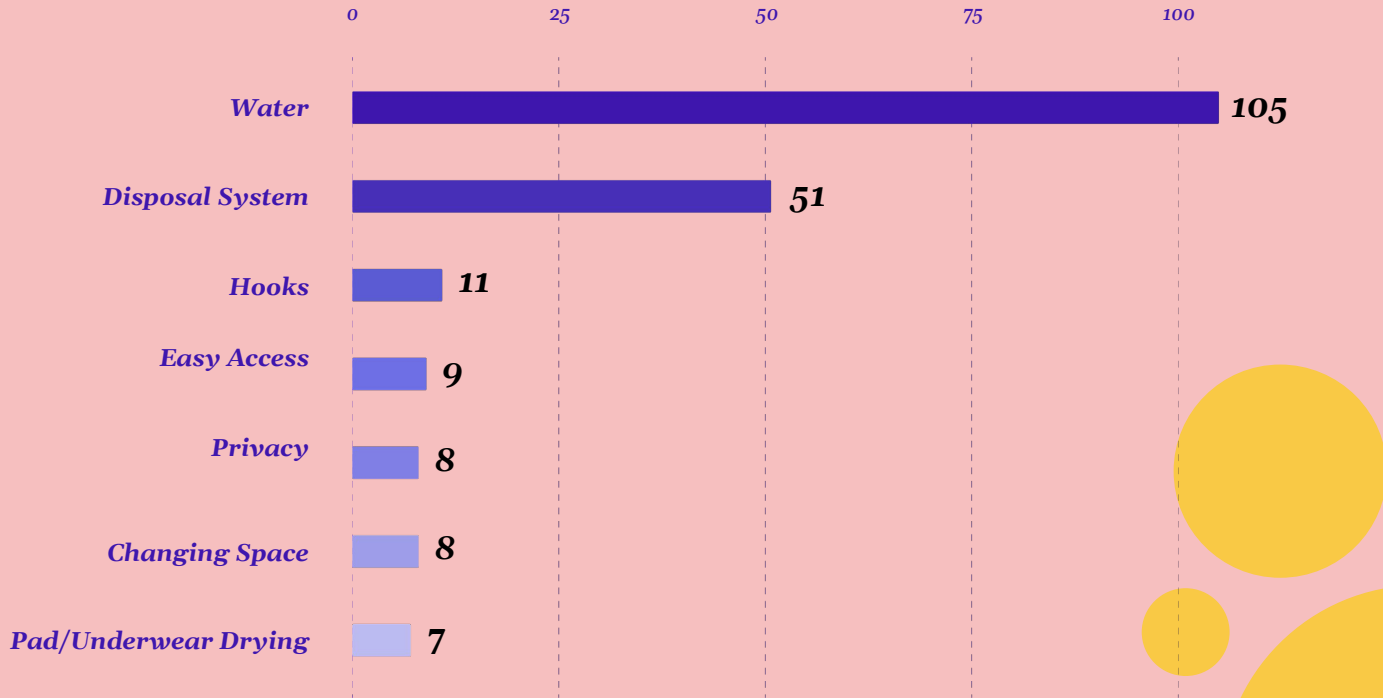
Menstruators have increased confidence that they will be able to manage their menstruation due to the trust that water will be consistently available, and that they have access to any Cocoon Mini in their community.

By having water access closer to bathing areas, menstruators are now able to save valuable time and energy that they otherwise would spend by traveling long distances to fetch water and waiting in long lines.

The Cocoon Mini has improved menstruators' mobility, as they are now able to freely move within the community to markets, health centers, and school as they are able to access any Mini to manage their menstruation.

Top Mini Features That Made MHM Easier

When asked an open-ended question on what Mini features made MHM easier to manage, the top answers included:



Improved Access to Disposal

The Cocoon Mini allows for easier access to disposal areas, which improves sanitation and prevents menstruators from discarding used feminine products in the bush or latrine. As the disposal systems are built within the structure, they are easy to access at the menstruators' convenience.



“The Cocoon Mini has helped me because I no longer dispose of used pads in the bush as usual since the Mini spaces are in all the villages.”

: Menstruator, Ariwa II



Domestic Convenience

By introducing the water tap, menstruators are able to use the Cocoon Mini space as a multipurpose area in which they can conveniently perform domestic tasks along with washing pads and bathing. Domestic tasks include the cleaning of cookware, fetching water for livestock, washing laundry, and watering gardens. These benefits also extend beyond menstruators to other community members who utilise the Mini's water source for the same domestic tasks.

Water as a Communal Benefit

Increased water access points benefited all community members, as they removed the need to search out and fetch water from afar. Men/boys are also interested in utilising the Mini's water source. More members of the settlement are able to address their hygiene with more ease.





Recommendations for Future Implementation

Improved Drainage

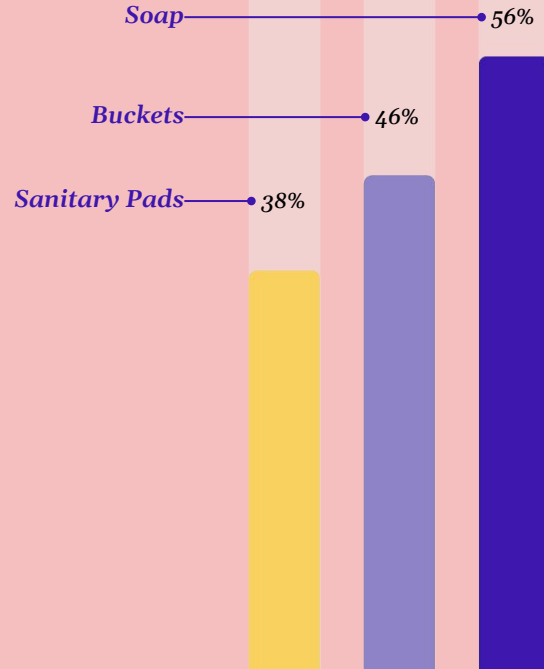
Not all drainage pipes properly redirect waste water.

Drainage pipes and soak pits need to be lengthened and dug deeper in order to properly divert waste water away from the Cocoon Minis and other households. Community members have concerns that the water will contaminate the environment, as there are gardens and children playing in the vicinity.

MHM Material Needs

Not all menstruators who visit the Minis have the necessary materials for maintaining their hygiene.

When asked an open-ended question on which MHM materials Mini should include, the top three answers were buckets, soap, and sanitary pads.





*02 The value of a
space is measured
by its material
longevity*

Background

- Temporary or makeshift structures are prevalent in the settlement and are prone to rapid degradation. This is due to high volume use, mismanagement, and the lack of funds to maintain or repair them.
- Psychologically, permanence imparts value. It is important to menstruators that the spaces they use be durable and long lasting.



**The Mini's
Effect on
Structural
Permanence**

If a structure is to survive in a humanitarian context, it has to be able to function without partner activity. Involving local masons and community members in the construction and maintenance of the Mini spaces was important to instill a sense of ownership and improve the chances of the sites' longevity.

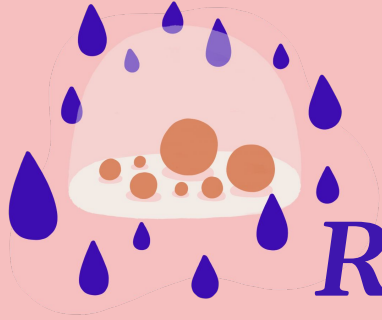
Teaching local masons about the construction process and using familiar materials were key in ensuring local knowledge on the Cocoon Mini for continued maintenance. Masons were taught how to construct menstrual pad drying bins and improved bathshelter structures.

Men and boys in the community were targeted to be key contributors to the construction of the Mini spaces. They were eager to participate, and their involvement improved their acceptance of the Mini's presence in the settlement. Menstruators trusted them to construct lasting structures. Men/boys also see the construction of the Minis as an employment opportunity and a chance to gain knowledge on construction.

"I would be willing [to learn] basically to gain or acquire skills of construction and also have an improved facility to be used to improve hygiene"

: Man, Ariwa I





Recommendations for Future Implementation

“I like the Mini but next time they should make a wall with roofing to prevent bad weather and rain.”

: Menstruator, Ariwa II





Future structures within the settlement need to be built to withstand environmental variables.

Construction with materials on poor quality soil leads to erosion during heavy rains. The rains cannot be avoided, so it is important to invest in technologies that secure and strengthen the substrate beneath structures.

***Suggested
Structural
Improvements***

- Using treated timber to prevent against termites and rot.
- Utilising bricks with better mineral composition that do not use poor local soil like the burnt bricks that are commonly used in the settlement.
- Waterproofing the bases of adjoining latrines to combat erosion from seasonal heavy rains.
- Extending the drainage pipes and digging deeper and farther soak pits for waste water to improve on the sites general hygiene.
- Employing stronger aggregate, timber, and mesh reinforcements for latrine pits to improve the structural integrity of pit walls and enhance the structures longevity.

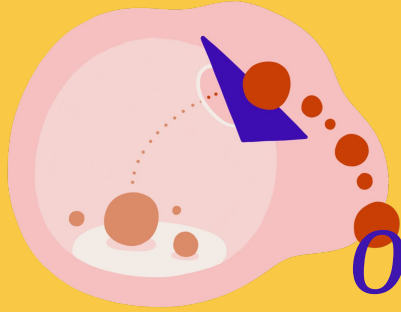
“They should construct both the pit latrine and bathroom such that [the Mini] can last longer because the current attached pit latrine collapsed.”

: Menstruator, Ariwa II





Additional Learnings




*03 The security of
the Mini space
must extend past
its four walls*

Background

- Menstruators feel that being seen or having their menstruation status known puts them at risk of abuse from men and children, both physically and psychologically.
- Menstruators have a deep fear that their used menstrual products will be found by men/boys and children, and used to publicly shame and belittle them.
- Menstruators experience considerable anxiety around using bathing shelters, as their privacy and peace of mind are often violated by people attempting to watch them bathe. Menstruators report that men and boys will climb trees or loiter around bathrooms in order to see them.
- Without adequate personal or security lighting, menstruators feel unsafe traveling to and from bath shelters and latrines at night, as it makes them vulnerable to attack by men.





Spaces that offer disposal options need to take into account that menstruators will not have peace of mind unless their discarded products are safe from tampering.

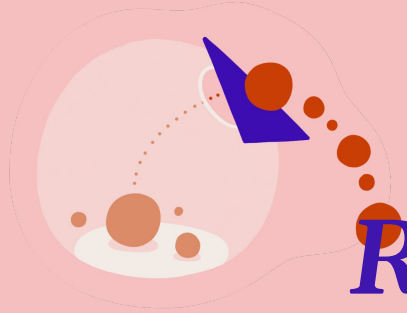
**The Mini's
Effect on
Privacy and
Security**

Having a space where menstrual status can easily be concealed from men and boys gave menstruators an increased sense of safety, as they were no longer easy targets of ridicule or belittlement.

Trusted members of the community were chosen to be Mini supervisors. Emptying and cleaning the menstrual pad drying bins was their responsibility. This was accepted by menstruators, as they believed their discarded products would remain private with the supervisors.

Menstruators will not use available disposal bins unless they have locks. After locks were added, menstruators began using disposal bins with more confidence, knowing that their products would be safe from tampering.

The Mini's high privacy walls and locking doors improved menstruators' sense of privacy and safety from possible intrusion.



Recommendations for Future Implementation

Men & Menstruation

Increase safety for menstruators by promoting education around the topic for men and boys.

This can be done by illustrating and explaining men's ability to either help or hinder menstruators' MHM experience. Men's MHM education leads to the normalisation of menstruation and combats existing harmful stigmas around MHM that promotes the harassment of menstruators.

Light & Mobility

Ensuring lit pathways to the Mini is critical towards ensuring the Mini can be safely used at night.

Accessing the space at night can be daunting for some menstruators. The brightness and duration of portable solar lights was insufficient for seeing beyond the immediate surroundings. Menstruators expressed concerns about the journey to and from the Cocoon Mini and requested brighter, more durable and extensive lighting to ensure their safety.

“Let them provide solar lights with strong power that can produce bright light that can allow us to see from far, since we lack torches to use at night”

: Menstruator, Ariwa II

Bathshelter Roofing

Adding roofing to the bathshelter portion of the Cocoon Mini would bring menstruators further security knowing that they are in an enclosed space. Additionally, adding a roof provides coverage from the elements, allowing menstruators to bathe even when it is raining.

Improved Privacy Wall

Switching the privacy wall material from plastic sheeting to iron sheets would improve the Mini's privacy level. The iron sheets are more resistant to wear and tear, and this material change would address menstruators' fear of children tearing and damaging the privacy wall.





Challenges & Opportunities

Challenges From the Cocoon Mini Pilot

Logistics

Heavy rains in the settlement delayed work. The roads are of poor quality and vehicles run the risk of getting stuck or running off the road. Most people can only afford to get rides on motorbikes, which cannot navigate the roads in those weather conditions either. This led to a delay in material delivery.

Procurement

Local masons would misuse construction materials, which led to additional procurement costs. In the event that funds are needed, cash and mobile payments are the only viable methods. If funds are in bank accounts or rely on credit cards, there are no systems for accommodating those transactions.

Labour

Because local labour was used to construct the Cocoon Mini, the project's timeline was heavily impacted by events that occurred within the settlement. For example, in order to give community members the opportunity to mourn the passing of a community leader, construction work was halted as engineers and masons in the settlement all went to the funeral.

• *Private transportation means should be arranged. Vehicles should be recently serviced and able to navigate rough roads. Additional private vehicles can also be used to ferry labourers.*

• *Calculate in a 10% buffer for the project procurement budget and purchase extra material to compensate for any material mismanagement.*

• *Factor in additional time for construction, as anything from food distribution to rain will halt all progress on construction.*

The Bigger Picture

The Cocoon project tested other ideas in its rough and live prototyping phases. Three prototypes in particular were created as part of a systems-based intervention. However, due to factors like budget, time, and feasibility constraints, they were not advanced to the pilot stage.

Those three prototypes were called Cocoon Maxi, The Monthly, and Launchpad.

*A total of 5
prototypes
were tested*



Systems Building

Together, the prototypes aimed to address the design challenge on a systemic level.



Cocoon Maxi

A large multi-purpose space that is accessible by the public for the purposes of events, education, female-friendly WASH facilities, and income-generating activities



The Monthly

A monthly storytelling session where older women and younger women alike share their experiences with menstruation and sexual health, along with educational content and sanitary product demonstration



LaunchPad

A community-run social enterprise that hires and upskills young women in making reusable pads, and trains young women and men to sell low-cost sanitary products door-to-door in their communities

Identified Areas of Opportunity

MHM Facility Accessibility

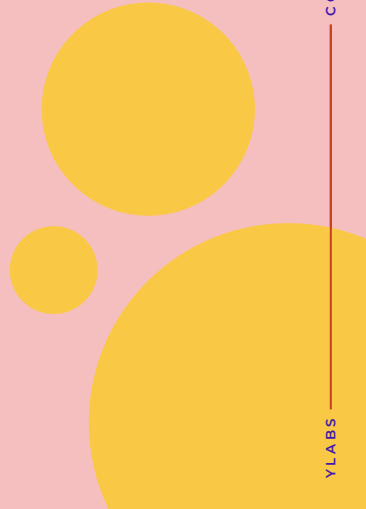
The Cocoon Maxi's main area of focus was accessibility. Menstruators expressed that there are not enough accessible MHM facilities. The Cocoon Maxi was highly desirable, but as one singular space in the community, its impact was limited and was not feasible for the scope of the project.

Education & Sensitisation:

The Monthly was designed to address the gap in MHM software solutions that is prevalent among both menstruators and men. Interventions in this area aid in decreasing MHM stigma and involving men in the conversation.

Market Supply

According to the WASH cluster in Yumbe, there is a large gap in menstrual hygiene product distribution and people have varying preferences for products (which means that reusable pads also have a high demand). Launchpad sought to create a more stable and sustainable supply of MHM products, while providing job opportunities for menstruators, men, and boys.



Areas of Opportunity For Future Research

Sustainability, Skill Building, & Resource Impact

- Teaching local masons how to build the Cocoon Mini spaces and hiring local labour increases the likelihood that the Mini units could be maintained and potentially privately built. Additionally, if something were to go wrong with the Mini, local masons could fix it without relying on partner intervention, moving the narrative away from partner reliance to more towards local ownership and independence. Further research focused on capacity-building could shed light on new methods of decreasing humanitarian reliance and promoting stakeholder skillbuilding, independence, and program sustainability.
- Involving men/boys in MHM solutions serves as a way of sensitising and educating groups that are often left out of the conversation. Investing in further research to include children in programmatic interventions could yield greater impact by targeting future influencers of menstruators' menstrual hygiene experience.
- The impact of the Mini's water source reached far beyond MHM. There are opportunities to research the trickle down effects of the Mini's increased water access on gender-based violence and protection challenges in the settlement.

Conclusion

*Big Wins
from the
Cocoon Pilot*

*Increased access
to water points*

*Enhanced mobility
within the settlement*

*Designed by and
for menstruators*

*Addressed MHM on
the household level*

*Menstruators can
bathe at any time
of the day*

No safety violations

*95% of menstruators
said the Cocoon Mini
had made menstrual
hygiene management
easier for them.*

*Sample data
collected
from 109
menstruators*

Thank You!