



REEMI

INNOVATION IN MENSTRUAL  
HYGIENE MANAGEMENT

*Overcoming Social Stigma and  
Creating Zero-waste Period  
Products*



## ABOUT REEMI

Reemi is a social enterprise based in New Zealand that aims to provide sustainable and culturally appropriate menstrual products, together with education, for people in most need. Reemi developed the world's first self-sterilising period underwear, along with several zero-waste MHM solutions and successfully piloted these MHM products to 6,000 garment workers in Bangladesh.

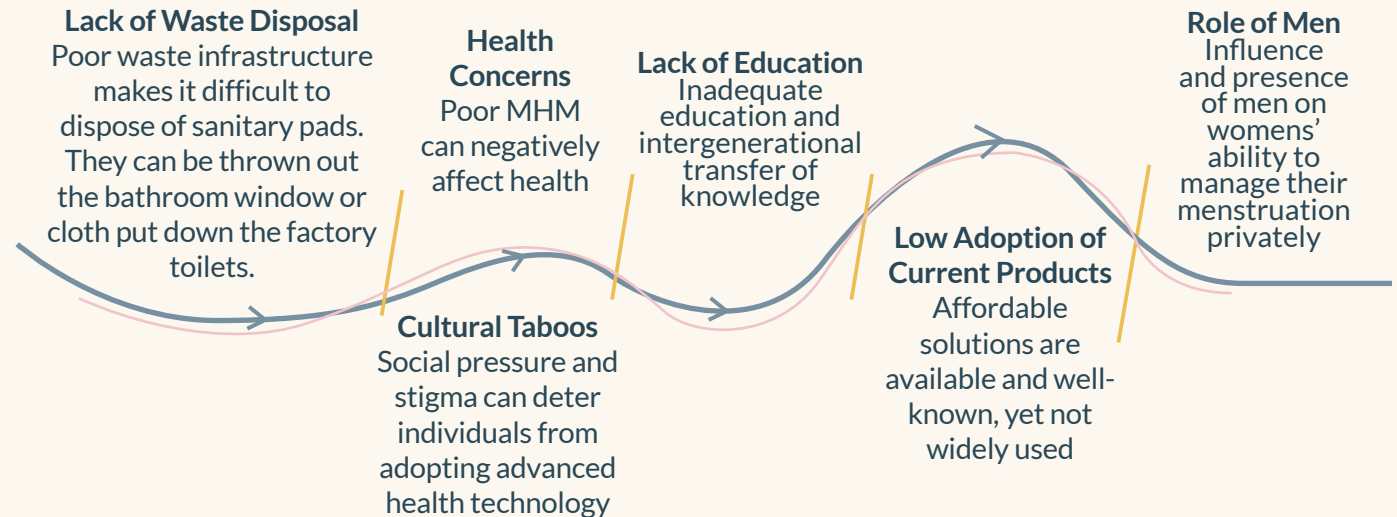
## BACKGROUND

Inadequate menstrual hygiene management (MHM) has been increasingly acknowledged as a global health concern that has been under-prioritised by public health practitioners and the humanitarian sector<sup>1</sup>. In Bangladesh around 65% of adult women use old cloth repurposed from an old saree or similar materials<sup>2</sup>. In addition to the day to day challenges that menstruation presents to women and girls in Bangladesh, there are many social taboos and stigma attached to even discussing the topic. Menstrual management products like cloth, which are commonly used, can be associated with health concerns related to inadequate washing and drying (due to a lack of privacy). Inserted products are not culturally appropriate for the Bangladesh context, and disposable products like pads not only take a long time to degrade environmentally but come with challenges associated with Bangladesh's poor waste disposal systems. In order to begin to change the stigma and taboos around menstruation, cultural factors need to be taken into consideration.

<sup>1</sup>Sommer, M., et al. "What is the scope for addressing menstrual hygiene management in complex humanitarian emergencies? A global review." *Waterlines*, vol. 35, no. 3, 2016.

<sup>2</sup>Bangladesh Bureau of Statistics. "National Hygiene Survey 2018." 2020.

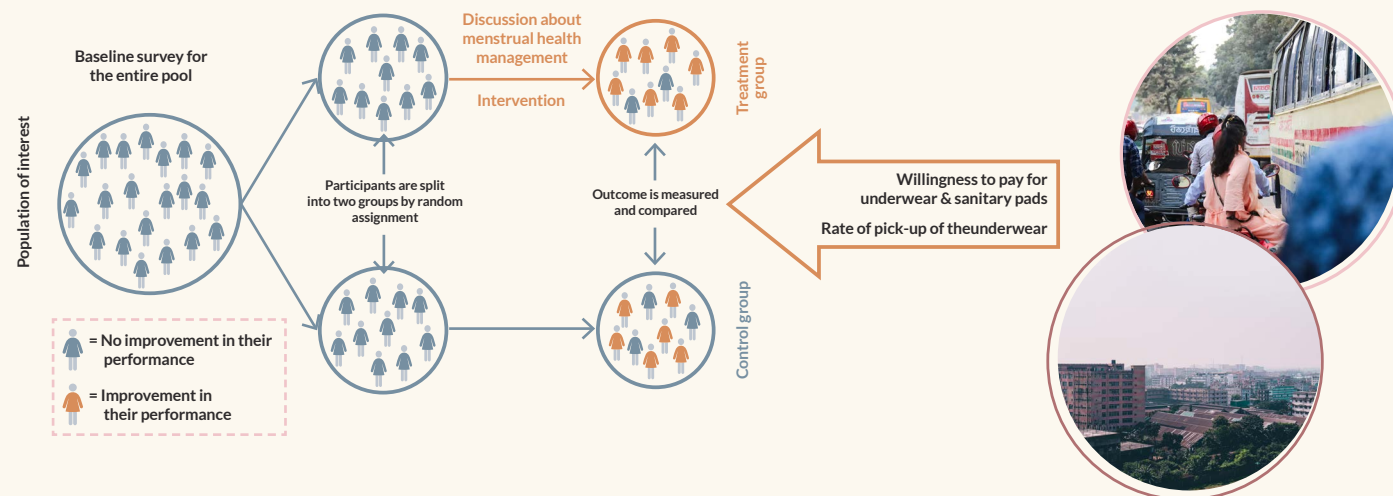
## KEY CHALLENGES FOR MHM



## WHAT WE DID

The three pilot studies were conducted in garment factories in Bangladesh over several years. The aim was to test innovative zero waste MHM solutions in combination with facilitated discussion sessions with female factory workers, addressing social stigma and taboos associated with menstruation. The research consisted of three pilots with more than 1,700 phone interviews, 4,200 pairs of period underwear distributed, 260 washing and drying bags, and 100 pairs of reusable pads across 724 participants.

## RANDOMISED CONTROLLED TRIAL - THE GOLD STANDARD



# ANTI-MICROBIAL PERIOD UNDERWEAR

"The rest of the workers are waiting eagerly to get their own period underwear after they heard about how well it has worked for those in the pilot."

- Gulshan Ara, Head of HR at Hop Lun

- **Absorption** - The Reemi period underwear features a gusset sewn with multiple layers of microfibre for absorption, allowing the user to wear the underwear for up to 7 hours depending on the menstrual flow.

- **Leak-proof** - The Reemi period underwear features an outer leak-proof layer at the bottom of the gusset. This allows the user to have more confidence in their daily activities without worrying about leaks. This is one of the top concerns for women whilst menstruating.

- **Antimicrobial** - The gusset area has an outer antimicrobial fabric to reduce the risk of infections. The self-sterilising fabric is made from a permanently bonded antimicrobial technology that helps in reducing vaginal infections caused by Candida Albicans as well as infections from other pathogens.



- **Discreet and comfortable** - The Reemi period underwear is a discreet black colour and looks exactly like regular underwear. It is made from fast-drying recycled nylon fabric designed for use in Bangladesh's hot, humid conditions.

- **Zero waste** - The Reemi period underwear are designed to be repeatedly reused each month. There is no waste to dispose of each month, and women then have the product on hand when needed.

- **Cost saving** - The reusable nature of Reemi period underwear means that monthly purchases of disposable pads or other products are no longer needed, saving money (40-60 BDT per month) in the long term.

Net Promoter Score (NPS) (range -100 to 100):	58
Product Rating:	7.8/10



# MHM WASHING BAGS

Joint partnership with icddr,b, iDE and Reemi

"The workers have been sharing with their welfare officer that they really like these MHM Washing and Drying bags and other workers are now asking when they can get some too." - FACTORY MANAGER FROM PILOT THREE

- **Hygienic/ability to wash used products without touching menstrual blood**

- The washing bags are designed to be used without needing to touch the used menstrual products. The bags have a scrubber on the inside at the base and are designed to be filled with water and detergent/soap. The used cloth or Reemi period underwear is placed inside and tied shut with the drawstring at the top. The bag is designed to be filled with water, scrubbed, emptied and repeated until the cloth is clean. The cloth can then be left to dry, as can the washing bag.

- **Waterproof** - The washing bags are designed to hold the water inside the bag without leaking and without any need to touch the blood. The fabric is available locally and easily sourced.

"I don't need to touch the dirty menstrual cloth while washing and now I feel like it's easy to clean."

- WORKER FROM PILOT ONE



- **Discreet** - The bags are a discreet design and shape to not draw much attention. They allow the women some privacy whilst washing intimate pieces of menstrual cloth or period underwear in often very public spaces shared with others.

- **Zero waste** - The washing bags are a zero-waste solution when combined with a reusable menstrual product like reusable pads, cloth or period underwear. There is no need to buy additional menstrual products every month, reducing environmental waste.

- **Cost saving** - The reusable nature of the MHM Washing Bags means that monthly purchases of disposable pads or other products are no longer needed, saving money (40-60 BDT per month) in the long term.

Net Promoter Score (NPS) (range -100 to 100):	81
Product Rating:	9.15/10

# MHM DRYING BAGS

Joint partnership with icddr,b, iDE and Reemi

"Before using this bag I would dry my menstrual cloth inside the home and hide it. But now I can dry it under the sun, in an open space with natural air."

- WORKER FROM PILOT ONE

- **Easy to Use** - The drying bags are designed to be easy to use. First the menstrual product is placed inside the bag on the cord on the inside, much like an internal washing line on the inside of the bag. This is then tied together at the centre. The bag is then fastened closed by a tie around two buttons at the front and tied onto the clothes line with four small ties at the top of the bag.

- **Breathable** - The fabric is fast drying and breathable which allows plenty of airflow through to the product/products enclosed in the bag.

- **Fast Drying** - The drying bags were designed to be fast-drying in a hot, humid environment, the mesh allows plenty of airflow to circulate through the bag.



- **Discreet** - The dark mesh fabric allows the bags to be very discreet when hung on a washing line. The fabric is lightweight but still discreet enough to not view the product inside the bag.

- **Zero waste** - Together, the reusable menstrual hygiene products and the washing and drying bag enables the user to have a completely zero-waste reusable solution to managing their menstruation.

- **Sustainable** - The drying bags are made from a natural fabric that is available in the local market and easily sourced.

"I use the bag to dry my reusable pad, so no one can understand what product it is and I can dry my reusable pad in an open area."

- WORKER FROM PILOT THREE

Net Promoter Score (NPS) (range -100 to 100):	81
Product Rating:	9.5/10

## EDUCATION

Facilitated discussion sessions were run with women aimed at breaking the silence around the topic of menstruation. Women were given a safe space to share their own experiences and enabled to confidently spread information to others, including their daughters, about the availability and quality of different methods to manage menstruation.

- Our results show that the **treatment (education sessions) significantly increased the women's willingness to pay** for sanitary pads by more than 25% compared to the control group's average valuation at 90 BDT (~ 1 USD). This increase corresponds to about 50% of the market price of pads (around 40-60 BDT).
- Our study has shown that a crucial step toward providing all women with hygienic menstrual health products lies in supporting women to openly engage with the topic. Thus women are empowered to overcome the social pressure and stigma otherwise limiting their access to affordable and available menstrual health technologies. Our results demonstrated that after the discussion sessions women more highly valued hygienic menstrual products; reduced their feelings of stigma associated with purchasing MHM products from male shopkeepers in public places, increased their up-take of emerging new menstrual products and reduced feelings of shyness or shame associated with the topic when discussing with their peers.

## RESULTS

**Key results from our research include:**

- Social stigmas and taboos can be tackled gently and appropriately through facilitated discussion groups, allowing women to share experiences, therefore reducing their feelings of shyness and shame attached to menstrual cycles.
- As prominent as the stigma and taboos around menstruation are in Bangladesh, we've also seen these taboos are penetrable. Our explicit measures for stigma and taboo show a **reduction on perceived social constraints of 50%**.
- Adoption of the new technology was **71% for the control and increased by more than 10 percentage points to 81% for the treatment group**.
- High desirability and willingness to pay for innovative MHM products, particularly the Washing and Drying Bags was observed through our research, **with ratings as high as 81 for the products on a NPS**. This is a remarkable figure as the NPS scoring system is based on the need to share and discuss the product with colleagues.
- We also observed after 6 months, only around 25% of women were still using cloth (down from 50%), pad use increased from around 60% to around 70% and around **70% reported using the Reemi period underwear**.
- Our research has shown that simple interventions such as facilitated group discussions increased the uptake of modern hygienic MHM products. Facilitated discussions therefore, will be very important for product distribution on a wider scale, otherwise uptake will likely remain low and obstacles such as social stigma and norms will not be addressed. Addressing these issues only occurs if an environment to openly discuss such issues is created.





## PARTNERSHIPS & ACKNOWLEDGEMENTS

- **Change Associates** is our implementation and education partner with a long history of health education in the RMG sector.
- Our work with the **University of Munich** consisted of a Randomised Controlled Trial - a field experiment run at the highest of academic standards.
- Our final pilot study included research support from local Bangladesh organisation, **iccd,rb**.
- Product design was developed through a design-thinking model in collaboration with **iDE Bangladesh**, and in addition, had support from **Basha Boutique and Hop Lun**
- We partnered across sector with manufacturing support from Hop Lun and AS Colour
- This work included more than 1,700 interviews run across a two year period

## FUNDED BY

Our work on Zero-Waste MHM solutions has been funded and supported by **Elrha's Humanitarian Innovation Fund (HIF) programme**, a grant making facility which improves outcomes for people affected by humanitarian crises by: identifying, nurturing and sharing more effective, innovative and scalable solutions.




**Elrha's HIF** is funded by aid from the **Netherlands Ministry of Foreign Affairs (MFA)** and the **UK Foreign Commonwealth and Development Office (FCDO)**. **Elrha** is a global charity that finds solutions to complex humanitarian problems through research and innovation. Visit [www.elrha.org](http://www.elrha.org) to find out more.

In Addition, funding was provided by **Hop Lun** and **AS Colour**.

## FIND OUT MORE

- Get more information on *Breaking the Silence* by reading about The University of Munich's working paper
- Learn about the other innovative zero-waste MHM products Reemi created
- Read about our three pilot studies supported by the HIF (Elrha)
- Find out ways to trial our products with your partners

Please email [emily@reemi.org](mailto:emily@reemi.org) or visit [www.reemi.org/research](http://www.reemi.org/research)

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