

June 2021 // Report to RHSC

LANDSCAPING SUPPLY SIDE FACTORS TO MENSTRUAL HEALTH ACCESS



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Reproductive Health
SUPPLIES COALITION

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Acronyms

AFD	French Development Agency
BMGF	Bill & Melinda Gates Foundation
CBOs	Community-Based Organizations
CIFF	Children's Investment Fund Foundation
CSR	Corporate Social Responsibility
COGS	Cost of Goods Sold
FIHA	Feminine and Infant Hygiene Association (India)
FMCG	Fast-Moving Consumer Goods
GDP	Gross Domestic Product
GST	Goods and Services Tax
I4ID	Institutions for Inclusive Development (Palladium-led project in Tanzania)
J&J	Johnson & Johnson (brand: Stayfree)
KC	Kimberly Clark (brand: Kotex)
KII	Key Informant Interview
LMIC	Low- and Middle-Income Country
MGH	Mann Global Health
MH	Menstrual Health
MHAI	Menstrual Health Association of India
MHM	Menstrual Hygiene Management
MNC	Multinational Corporation/Company
NGO	Non-Governmental Organization
P&G	Proctor & Gamble (brands: Always and Whisper)
RHSC	Reproductive Health Supplies Coalition
RRP	Recommended Retail Price
SAP	Super Absorbent Polymers
SMO	Social Marketing Organization
SRH	Sexual and Reproductive Health
SSA	Sub-Saharan Africa
TFV	Trade Finance Vehicle
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAT	Value Added Tax



Photo credit: Knit Together Initiative

Terminology

For the purposes of this report, we use the following terms as defined below:

- ❖ **Menstrual health (MH) products** refer to the following types of commercially sold products: disposable pads, tampons, reusable pads, and menstrual cups.
 - Period panties are generally considered as reusable pads.
 - Panty liners are generally considered as disposable pads.
 - Many menstruators in Africa and Asia use loose cloth or cotton wool as a menstrual absorbent. This can be a safe, healthy, and effective practice. However, as the cloth and cotton wool are rarely sold specifically as MH products, we do not include them within the definition of MH products for the purposes of this report.
- ❖ The gender-inclusive term **menstruator** denotes anyone who uses MH products, including girls, women, and others who menstruate.

I. Executive Summary

The Purpose of This Report

Although menstrual health (MH) is increasingly seen as a fundamental need within the global sexual and reproductive health (SRH) agenda, over 500 million menstruators across the world still cannot access the safe, quality, and affordable products they need to manage their menstruation. There is limited funding for menstrual health, and although efforts to address key challenges have been deployed, none have successfully transformed the prospects for product access at scale.

Unlike most other SRH products, the MH market in sub-Saharan Africa (SSA) and Asia is driven primarily by consumer purchases, with limited bulk procurement by non-governmental organizations (NGOs), governments, and/or donors. The commercial market for MH products offers significant potential to expand and adapt to meet the growing needs of menstruators, particularly for populations at the last mile. Key stakeholders, including donors, governments, and advocates, need more information to understand the constraints that affect the MH market along the supply chain – from product manufacturing, through importation and distribution, to access. We also need to identify key business models that dominate the MH market, and the comparative advantages and relative effectiveness of specific MH interventions, to better understand how to target recommendations and subsidies that can facilitate further growth of the market.

The purpose of this report is to summarize findings on the key constraints to and opportunities for MH product access, and to outline recommendations for donors, governments, and other actors within the market. The MH Market Intervention Framework, found in Section VIII, provides these key stakeholders with an MH market maturity rapid assessment tool (see Annex 1), and a way to select and prioritize recommendations for a country given its relative market maturity, the market functions being addressed, and the actors in the supply chain that the recommendation would be most relevant to.

Summary of Key Recommendations

- 1. Incentivize product choice, which underpins use.** Ensuring menstruators are aware of and have access to **full product choice**, including a range of product types and brands to meet a menstruator's needs, facilitates use. Continued investments in the development of **product standards** and their **fair and effective enforcement** is one way to ensure availability of a range of quality products. Incentivizing the design of **innovative products** also presents the opportunity to support even modest improvements that can differentiate products for the diverse needs of menstruators.
- 2. Support market actors to grow scalable, sustainable businesses.** Investing in market actors, particularly brand owners and manufacturers operating at a national or regional level, has the potential to spur healthy growth in the MH market and meet the needs of menstruators. **Innovative financing mechanisms** can strengthen local manufacturers and brand owners and

help address the various capital and capacity constraints they face. In particular, investments that shift **manufacturing closer to markets** through financing and incentives to support the quality, scale, and sustainability of local manufacturers brings the potential to lower transportation costs of bulky finished products and improve distribution efficiency. **Improved coordination** between brand owners and manufacturers, including pooled procurement and contract manufacturing, could also reduce costs by supporting economies of scale. For existing manufacturers, investments in updated and larger machines and/or molds can improve quality of production and introduce greater economies of scale. Decentralizing manufacturing will also benefit from **changes to tax and tariff policy** after careful consideration at the policy level. In addition to manufacturing support, brand owners will also benefit from targeted **technical assistance** in branding, marketing, sales, and distribution to improve positioning of MH products to retailers, and onward, to consumers.

3. **Improve distribution to support greater access and affordability. Positioning MH interventions within the context of broader donor initiatives presents the opportunity to expand access.** While funding for MH interventions is limited, a number of donors have recently emphasized engagement of private sector distributors to increase equitable access to a portfolio of affordable, quality products and services (often focusing on other SRH products). MH products are uniquely positioned to capitalize on those investments. **Experimentation with non-traditional distribution outlets and channels**, such as through e-commerce, vending machines, and/or fashion and beauty stores, is promising and needs to continue with iteration and evaluation to dial in what works. **Traditional distribution models, when managed efficiently**, have also demonstrated the potential to efficiently reach rural markets with affordable prices, especially as demand grows and is paired with promotion and education. Governments should develop policies to ease **new product and brand market entry** while maintaining a level playing field.

Finally, **free and subsidized distribution programs** are still needed; targeting free distribution to specific populations (such as at schools to introduce young menstruators to the range of products available) can support rather than hinder the wider commercial market.

4. **Support awareness building, demand generation, and the evidence to inform future work. Category-wide promotion** and demand generation is needed across regions and particularly in rural areas to catalyze demand and prompt retailers to carry products. Promotion will be most successful when paired with broader education on the body and other SRH topics, including puberty education programs. Promotion and education efforts should also be paired with **community-wide MH stigma reduction** efforts that aim to reduce the taboos around menstruation. Investing in strong **coordination and coalition building** across a wide range of actors at the country and regional level can also support a diversity of initiatives to achieve common objectives. Improved data collection and synthesis and increased evaluation of MH market innovation is also urgently needed. Only with such investments in **evaluation and data collection** will we be able to confidently build healthy, sustainable MH markets for all menstruators in Africa and Asia.

II. Introduction

Context

More than 300 million people menstruate daily, and many of them are in low- and middle-income countries across sub-Saharan Africa (SSA) and Asia.¹ While menstrual health (MH) is beginning to be accepted as a critical area within the global sexual and reproductive health (SRH) agenda, millions of menstruators across the world still cannot access the safe, quality and affordable products that they need to manage their menstruation in a dignified way. There have recently been a variety of efforts to address critical challenges to the access of MH products, particularly at the last mile. These include efforts to reduce taxes and tariffs; offer more product choice by introducing reusable products; trial innovative financing approaches such as impact bonds; expand distribution channels to include e-commerce, community agents, and piggy backing on existing fast-moving consumer good (FMCG) channels; and support local manufacturing, among others. But none have yet successfully transformed prospects for product access at scale.

The MH sector currently receives only minimal donor support. While there is some funding from donors like the Bill and Melinda Gates Foundation (BMGF), Global Affairs Canada, The Case For Her, and some local governments, much of this is focused on free distribution of MH products, puberty education and stigma-reduction programs, toilets and related infrastructure, and operational research to advance the evidence base for MH. There is little transparency on total funding amounts for MH funding, but it is widely known that funding levels are very marginal and nowhere near what is required to meet the challenges and needs at hand within the MH sector.² As such, unlike most other SRH products, the MH market is driven primarily by consumer purchases, with limited bulk procurement by non-governmental organizations (NGOs), governments, and/or donors.

That being said, the commercial market for MH products offers significant potential for expanding and adapting to meet the needs of menstruators, particularly for populations at the last mile. There is rapid growth within the MH market, with demand driven by increasing numbers of young people, an emerging middle class with growing levels of income, changing social norms related to menstruation, and swift product and market innovation.

As MH product access receives more attention, it is critical that we better understand the complexity of the MH market including commercial considerations, the ecosystem of enabling factors within which this market operates, and key constraints to product flow through the supply chain, including product manufacturing, importation and distribution, and ultimately, access. We also need to identify key business models that dominate the MH market in SSA and Asia, and the comparative advantages and relative effectiveness of specific MH interventions. Without a better

¹ Laura Amaya, Jaclyn Marcatili, Neeraja Bhavaraju, *Advancing Gender Equity by Improving Menstrual Health: Opportunities in Menstrual Health and Hygiene* (FSG, April 2020)

² *Making the Case for Investing in Menstrual Health and Hygiene* (2021). https://menstrualhygieneday.org/wp-content/uploads/2021/01/Making-the-Case-for-Investing-in-MHH-Report_Final.pdf

understanding of the existing market, it will be difficult to appropriately tailor market interventions and subsidies in a structured and targeted manner that allows us to optimize resources and truly transform access to MH products.

Mann Global Health (MGH), in partnership with the Reproductive Health Supplies Coalition (RHSC) developed this report with the aim of informing decision-making for tailored MH market interventions to realities on the ground. Our objective was to better understand the MH markets in SSA and Asia, assessing challenges and market constraints and identifying opportunities to increase access to MH products. An in-depth review of market data both at a global level and through country-specific deep-dives in Kenya, Tanzania, Nigeria, and India informed our work, which led to recommendations to advance the growth of MH markets.

Strategic Questions Guiding Our Analysis

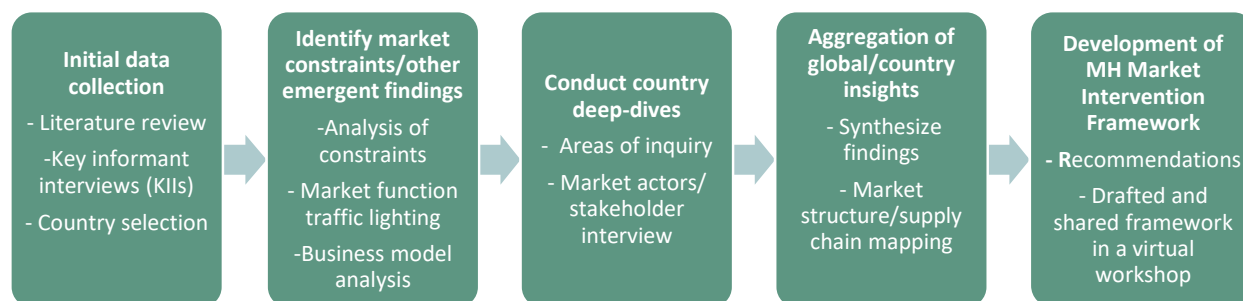
- ❖ What is the **overall structure of the MH market** (including volume, price, quality, product choice, market value, size and potential growth?)
- ❖ What factors **impede access** for affordable, quality MH products at different points along the supply chain?
- ❖ What factors **impact price** for affordable, quality MH products at different points along the supply chain?
- ❖ How is access affected by **product options** and innovations?
- ❖ What are the high potential **business models to scale and improve access**?

Annex 2 provides guidance on where in the report to look for answers to these strategic questions.

This report outlines our key findings from this analysis, and includes an MH Market Intervention Framework that supports donors, governments, manufacturers, social enterprises, and other community actors to select among and prioritize recommended market interventions given country contexts.

III. Approach and Methodology

We took a structured approach to our analysis to focus on supply and access related constraints in the MH market.



Initial Data Collection

To amplify our knowledge on existing MH interventions at a global, regional, and country level, we took a two-pronged approach to data collection:

- ❖ **Literature review:** As excitement about the MH field grows, more data, research, and tools are being produced at a rapid pace. We mined over 50 sources, including published and gray literature, to gather key insights into specific functions within MH markets and how they perform in SSA and Asia. A full list of documents reviewed is included in Annex 3.
- ❖ **Key informant interviews (KIIs):** Context was also shaped through interviews with 20 key informants at the global level to build off findings from the literature. Key informants included manufacturers and brand owners, funders, implementers, and others who have conducted recent MH market analysis. A full list of key informants who were interviewed is included in Annex 4.

Identifying Market Constraints and Other Emergent Findings

The analysis identified key findings by core market function (i.e., product, place, price, and promotion) and supporting functions (e.g., taxes and tariffs, guidance, coordination, financing, etc.). Avenir Health graciously shared their country-level analysis of existing survey data on commercial MH product use, supplementing our market trend data.³ We also gathered lessons underpinning specific business models and interventions in terms of both their success with increasing access to MH products, and tough lessons that could be applied to more nascent markets and began to map the supply chain for MH products. Our goal was to broadly understand the MH ecosystem at a global level, so we could begin to frame country deep-dives with more targeted inquiries to fill context-specific gaps.

³ RHSC, *RH LEAP (Landscape Assessment and Projection of RH Supply Needs)* (2021, Forthcoming)

Country Deep-Dives

To further understand our initial global review and to identify context-specific challenges, we conducted deep-dive assessments in four countries in SSA and Asia: **Kenya, Tanzania, Nigeria, and India**. This allowed us to capture and consolidate specific constraints, enabling factors, and interventions that could be drawn on more broadly in designing and supporting MH market interventions. The countries were selected for key reasons:

- ❖ Representation of geographic diversity across East Africa, West Africa, and Asia;
- ❖ Interest from key donors and MH stakeholders in better understanding these markets;
- ❖ Large- or medium-sized potential markets with varying levels of MH use and existing MH innovations in progress;
- ❖ A diversity of approaches across countries, including government or coalition engagement, free and subsidized distribution, local manufacturing, and direct-to-consumer distribution.

The deep-dives included an additional 55 KIIs, conducted with local manufacturers and brand owners, importers, distributors, wholesalers, retailers, and other stakeholders. The information from these interviews was analyzed and synthesized in conjunction with local market knowledge and then fed into the overall global analysis. County-specific findings can be found in Annex 5.

Developing Recommendations and the MH Market Intervention Framework

Recommendations to address priority market constraints across these MH markets factor in the reality of a vibrant MH market, but also the limited donor resources. The **MH Market Intervention Framework** aims to support users in selecting and prioritizing interventions that address key country-level constraints and build strong MH markets. It first offers users a simple approach to rapidly assess the maturity of a country's MH market. Based on that assessment, it then helps users to assess the relevance and targeting of market interventions to improve access. The draft recommendations and framework were shared at a virtual workshop with MH stakeholders and market actors and revised based on the feedback received.

Limitations

While we reviewed a wide range of documentation, existing MH-specific market information for SSA and Asia is limited, especially outside the few countries for which previous commercial or donor-funded market research has been completed. Our assessment was primarily qualitative and so captured only limited quantitative data on market size, breadth, etc. The COVID-19 pandemic also impacted our team's ability to travel outside urban areas and to conduct in-person visits to actors along the supply chain, particularly wholesalers and retailers; this led to limited ability to do a thorough analysis of product prices, margins, and brand availability. Finally, while many of our recommendations build on promising approaches we observed, most of these approaches have not been evaluated to assess cost-effectiveness, impact, and overall viability. Other recommendations are based only on the observed constraints in the MH markets and

knowledge of what has worked to improve access to other health products in low-and middle-income countries (LMICs).



IV. Market Trends and Topline Findings

Market Trends

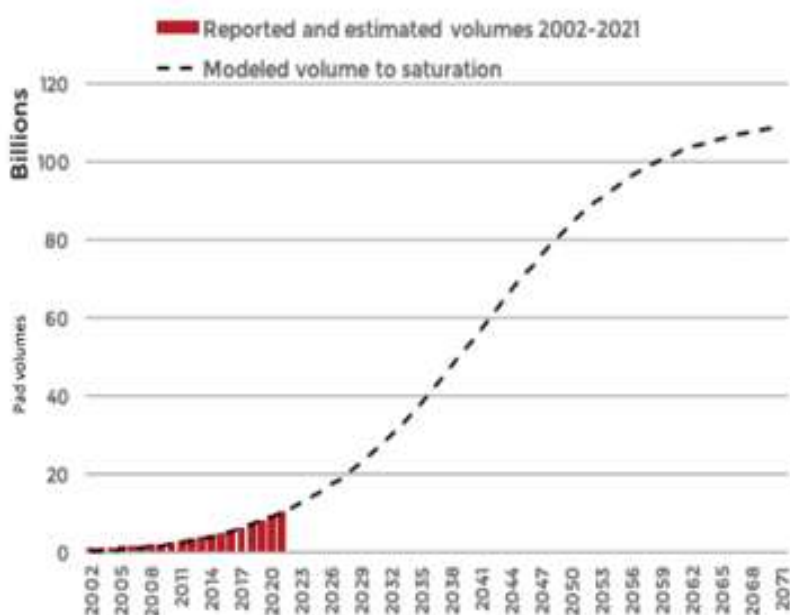
More than 500 million menstruators globally lack access to everything they need to manage their menstruation.⁴ This equates to one-fourth of the global female population of reproductive age. The MH market is growing rapidly and has huge potential for future growth. In India, sales volume is doubling every five years, but still only meets about 10% of the potential market, as shown in Figure 1.^{5,6} On an individual level, urban, wealthy, and educated menstruators are most likely to use commercial MH products.⁷ **This reflects the challenges in access, affordability, and awareness that lead to latent demand and limited use of commercial MH products.**

Topline Findings

Key overall findings from our assessment are outlined below, with a more detailed analysis of the key insights and constraints related to core and supporting functions included in Section V.

- ❖ **Manufacturing is not easy.** Manufacturing of most product types requires expensive to maintain, capital-intensive equipment to achieve economies of scale. In addition, high-quality raw materials can be challenging to source.
- ❖ **Inefficient fragmented supply chains lead to high retail prices.** Bulky MH products consume cargo and storage space and face an operating environment challenged by insufficient operating capital, inefficient

Figure 1: Projected retail sales of MH products in India shows rapid growth with only a fraction of need met



⁴ Laura Amaya, Jaclyn Marcatili, Neeraja Bhavaraju, *Advancing Gender Equity by Improving Menstrual Health: Opportunities in Menstrual Health and Hygiene* (FSG, April 2020)

⁵ Aylward, P., K Little K, V Sharma, M Satpati, A Singh, F Ahmed, M Punzi, S Rosenberg, B Caruso, *Increasing Access to Menstrual Hygiene Products in India: A market development approach* (Population Services International, 2018)

⁶ The *potential* value of the MH market is based both on the percentage of menstruators using commercial products in a year and the number of products that a menstruator uses per year or per menstrual cycle. In high-income countries, a typical menstruator uses approximately 20 disposable pads per menstrual cycle, while a menstruator in a lower-income country may use a smaller number of disposable pads per cycle, using them for longer periods of time and/or supplementing with non-commercial absorbents.

⁷ Laura Rossouw, Hana Ross, *An Economic Assessment of Menstrual Hygiene Product Tax Cuts* (Gates Open Res. 2020; 4) doi: 10.21955/gatesopenres.1116672

distribution, and poor infrastructure. Inefficiencies along the supply chain leads to high prices for end users.

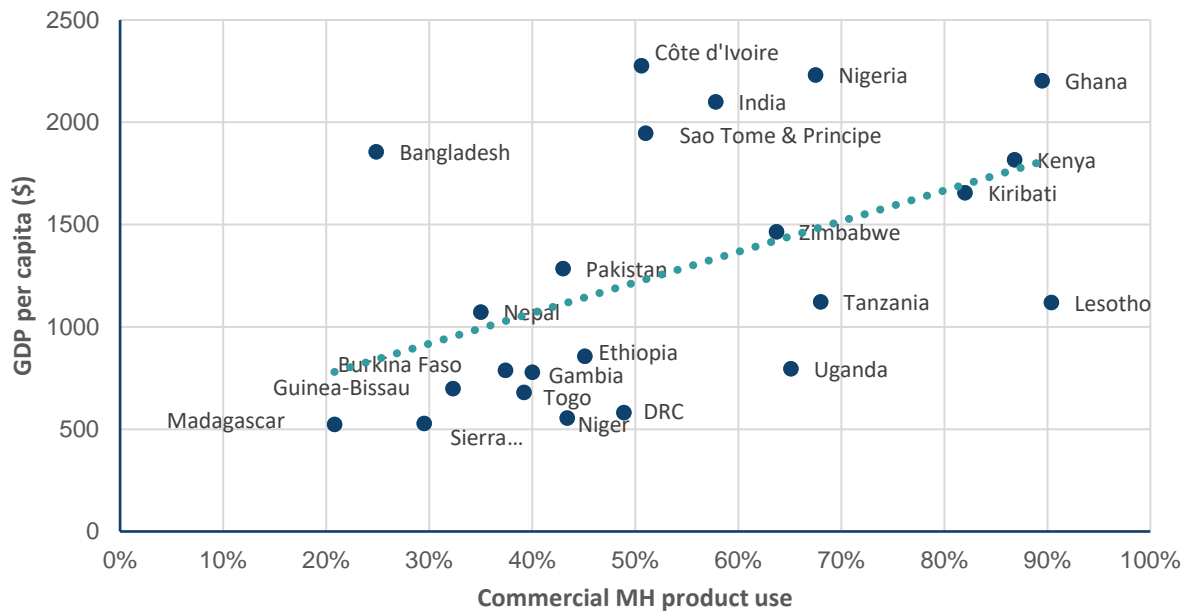
- ❖ **Awareness of MH product options (types, brands, quality) limits demand, and thus supply.** Retailers will not carry what is not in demand by consumers. While latent demand exists, a general lack of awareness inhibits demand, and thus supply and uptake. There is a need for more education and consumer support around product options, particularly for reusable products and smaller market entrants, to ensure that menstruators are aware of their options.
- ❖ **Inherent challenges with current products.** MH products are ideally easy to use and clean, of high quality, environmentally sustainable, affordable, and acceptable. Current products meet some, but not all of these criteria. Innovation is needed to further understand consumer preferences and develop new and/or improved products that better meet the needs of menstruators.

Other High-Level Findings

- ❖ **Income matters.** Higher per capita gross domestic product (GDP) is strongly associated with higher use of commercial MH products, as shown in Figure 2.⁸
- ❖ **Social enterprises** are proliferating and seen as promising models but face steep challenges for sustainability and scale.
- ❖ **Distribution innovations represent tremendous potential to increase access.** New channels for distribution such as e-commerce, community agents, and vending machines are promising, but require additional evaluation prior to further investment.
- ❖ **Concerns about quality and misleading marketing** claims are increasing as demand and markets grow.

⁸ Commercial MH product use estimates are based on data consolidated from 33 Multiple Indicator Cluster Surveys (MICS) and 9 PMA2020 surveys. Data analyzed by Avenir Health for RHSC. Per capital GDP data from World Bank. For these use estimates, menstruators who report using a commercial MH product may be using multiple products types and/or mixing use of commercial products with non-commercial products (e.g., cloth, rags, or homemade reusable pads).

Figure 2: Correlation between per capita GDP and commercial MH product use



At the country level, the MH markets we assessed were varied. See Table 1, on the following page, for a summary of key aspects of each market. More details on available MH products and brands in each deep-dive country are under Section VI on Market Functions, Product and in Annex 6.



Photo credit: Knit Together Initiative

Table 1: Summary of Market Trends for Menstrual Health Products⁹

	Kenya	Tanzania	India	Nigeria
# users¹⁰	~14 million menstruators	~13 million menstruators	~368 million menstruators	~44 million menstruators
% use¹⁰	87% of menstruators use commercial products: 82% disposable pads; 4% reusables; 13% other non-commercial products (i.e., cloth)	68% of menstruators use commercial products: 65% disposable pads; 3% reusable pads and menstrual cups; 32% other non-commercial products	58% of menstruators use commercial products: 55% disposable pads; 3% reusable pads and menstrual cups; 42% other non-commercial products	68% of menstruators use commercial products: 64% disposable pads; 3% reusable pads and menstrual cups; 33% other non-commercial products
Market value & volume¹⁰	- Estimated value at ~\$207million - Estimated market volume at ~1.4b disposal pads, 2.8m reusable pads, and 8,500 menstrual cups	- Estimated value at ~\$171 million - Estimated market volume at ~1.2b disposable pads, ~2m reusable pads, and ~6,000 menstrual cups	- Estimated value at ~\$3.4.billion - Estimated market volume at ~32b disposable pads, ~43m reusable pads, and ~404,000 menstrual cups	- Estimated value at ~\$632 million - Estimated market volumes at an estimated 4.3b disposal pads, 6.9m reusable pads, and ~20,000 menstrual cups
Projected market value^{10,11}	Projected market value in 2025 is estimated at ~\$234million	Projected market value in 2025 is estimated at ~\$201 million	Projected market value in 2025 is estimated at ~\$3.5 billion	Projected market value in 2025 is estimated at ~\$729 million
Product choice	At least 25 disposable pad brands, 2 reusable pad brands, 7 tampon brands, and 5 menstrual cup brands	At least 19 disposable pad brands, 3 tampon brands, and 2 menstrual cup brands	At least 20 disposable pad brands, 16 reusable pad/panty brands, 5 tampon brands & 24 menstrual cup brands	At least 13 disposable pad brands, 3 reusable pad brands, 1 tampon brand, and 3 menstrual cup brands
Pricing¹²	Disposable pads ranged from \$0.32 to \$2.76 (4-20 pack); tampons from \$2.23 to \$4.92 (16 pack); and menstrual cups from \$19.50-\$27.86	Disposable pads ranged in price from \$0.69 to \$1.54 (pack sizes of all ranges); and reusable cups from \$10.78- \$17.25	Disposable pads ranged in price from \$0.38-\$3.56 (4-12 pack); tampons from \$1.62-\$8.22 (10-20 pack); and menstrual cups from \$2.74- \$21.92	Disposable pads ranged in price from \$0.61 to \$4.24 (8-12 pack); tampons at ~\$1.82, and menstrual cups from \$36.47- \$42.55
Market composition	Imported MNC brands dominate the market; 2 local manufacturers limited by high production costs, but mid-tier importers gaining traction.	A locally-owned imported brand dominates the market, with several imported MNC and mid-tier brands taking up market share. One local manufacturer.	MNCs dominate the market. Rapid growth in mid-tier manufacturers, and a strong push for cottage industry /small-scale production. Some MNCs manufacture in-country.	Imported MNC brands have the largest market share, but local mid-tier manufactured and imported Chinese brands are also gaining market share.

⁹ Unless otherwise noted, data are based on a qualitative information captured during the country deep-dives.

¹⁰ RHSC, *RH LEAP (Landscape Assessment and Projection of RH Supply Needs)* (2021, Forthcoming). Estimates from 2019. Kenya and Nigeria estimates were informed by their PMA2020 survey data and India estimates were informed by the most recent Demographic Health Survey. Tanzania data were based on regional and income group averages. For these use estimates, menstruators who report using a commercial MH product may be using multiple commercial products types and/or mixing use of commercial products with non-commercial absorbents (e.g., cloth, rags, or homemade reusable pads). They may also be using commercial products for longer than recommended. Figures in this report have been rounded and may not add up precisely.

¹¹ This assumes the status quo continues through 2025. The RH LEAP report has additional projections that assume increased access and increased use of reusable products.

¹² Pack sizes vary in different countries, and since this was mostly an observational analysis, we have not been able to do a thorough analysis on costs per unit of MH product.

V. Business Models and Market Structure

Identifying the dominant business models for MH products globally and across our deep-dive countries was necessary to map the structure for the market and supporting supply chain. Applying a broader market development approach to understand the roles of business models enabled us to understand how the market is segmented by existing actors, and importantly, understand how future investments and interventions can be targeted to address underlying market constraints. Our analysis unpacked four common business models supporting upstream MH access, with downstream models focused on last mile distribution.

Upstream Business Models – Brand Owners

Brand owner business models are primarily differentiated by size, location and geographic reach of the company, but differences were also apparent in types of products, functions within the supply chain, their relative strengths and weaknesses in the market, and the distribution channels they tended to use. These distinctions present opportunities to shape and support investments and partnerships with each model.

The four upstream business models that were common across the markets, described in more detail in Table 2, are:

- ❖ Cottage industry manufacturers;
- ❖ Social enterprises;
- ❖ Mid-tier local manufacturers and importers;
- ❖ Multinational companies (MNCs).

Table 2: Upstream Business Models – Brand Owners

Business Model	Product Type(s)	Primary Function	Description/Examples	Role in Market Structure
Cottage industry manufacturer	Disposable and reusable pads	Manufacturing, Marketing, Distribution & Sales	In Asia, NGOs, community-based organizations (CBOs), and micro-entrepreneurs use pad machines for disposable pads from Saral, Jayaashree, etc. In both Africa and Asia, NGOs and micro-entrepreneurs make reusable pads.	Distribution is often limited to communities proximate to production
Social enterprises	All	Design and/or Manufacturing, Marketing,	Local and regional companies such as AfriPads, ZanaAfrica,	SE play an active role in pushing innovative

		(some) Distribution	BeGirl, as well as global companies such as Ruby Cup. May also offer education, advocacy, and other sector-relevant programs.	distribution to non-traditional outlets to address the needs of menstruators.
Mid-tier (mid-sized) local manufacturers and importers of white label products	Disposable pads	Manufacturing and/or Importing, Marketing, (some) Distribution	Generally operating in one country and sometimes foreign-owned. Includes a mix of importers buying from white label manufacturers and local manufacturers marketing their own brands (e.g., Eve & Comfort pads in Ethiopia; Kipepeo & Freestyle pads in Tanzania).	Tend to leverage traditional FMCG and pharmaceutical distributors.
Large-scale multinational corporations (MNCs)	Disposable pads, tampons	Design and/or Manufacturing, (some) Importing, Marketing	Centralized manufacturing is accompanied by large marketing budgets (e.g., J&J, P&G, Kimberly Clark, Unicharm, and some larger Asian/Middle-Eastern companies).	Most MNCs contract out distribution, using mainly traditional FMCG and pharmaceutical distribution channels.

While these groupings are helpful in distinguishing between types of brand owners, it is important to note that the actors deploying these models are not static. For example, actors in the cottage industry are evolving to integrate factors associated with social enterprises into their work; social enterprises may grow into mid-tier companies and/or be operating at a multi-national level; and mid-tier companies have grown to export product to neighboring countries, taking on aspects of MNCs. However, we did find the presence of these business models to be consistent across countries.

To more clearly distinguish the functions of the brand owners in the supply chain, we defined three different approaches to manufacturing. These are:

- ❖ **In-house (or brand) manufacturers.** The brand owner is the manufacturer. They may also design, import, and support elements of distribution, and typically invest in marketing and sales functions. An example of this is AFRIPads, which designs and manufactures its reusable pads at its own factory in rural Uganda. When we refer to **local manufacturing** by a brand

owner, we are referring to in-house manufacturing that takes place in the same country where the brand owner is located and product is distributed, unless otherwise specified.

- ❖ **White label importers.** The brand owner – often an entrepreneurial importer that sees an opportunity in the market – purchases generic, or “white label”, product from a manufacturer and over-brands those products, imports into the market, and manages downstream functions including marketing and distribution. The manufacturer packages the generic product to the specifications of the brand owners. An example of this is ZanaAfrica, which purchases a white-label disposable pad from a generic manufacturer for its Nia brand, sold in Kenya. Brand owners are able to influence product design by choosing between manufacturers and the options they offer.
- ❖ **Contract manufacturing.** The brand owner designs a product and contracts, or out-sources, to a manufacturer per the brand owner’s specifications. The brand owner then imports the product and manages downstream functions. An example of this model is BeGirl, which has designed a period panty and contracts a manufacturer to make the product, and then imports and sells it in Mozambique and Kenya.

Our landscaping uncovered limited information about **white label and contract manufacturers** for MH products. While some brand owners readily shared who their manufacturing partner was, others were reticent. For disposable pads, these manufacturers are located primarily in China, with increasing presence in India, other Asian, and Middle Eastern countries. An interview was conducted with Wager Group, a manufacturer partner for over 40 disposable pad brands sold in India and other countries. We also saw a Kenyan manufacturer, African Cotton, that offered white label manufacturing for other disposable pad brands. Menstrual cups are manufactured in China, Europe, and North America, with a few brands in India and South Africa (e.g., the mPower cup). Most tampons are manufactured in Europe.

Cottage industry manufacturing of disposable pads is seen primarily in India and Nepal, where low-cost, small-scale disposable pad machines are available from several machine manufacturers. While we heard of some attempts to import these machines into African countries, we did not hear of any examples currently functioning. In both Africa and Asia, there are examples of reusable pads being made at the cottage industry level.

We identified two types of **cottage industry support groups**. The first type consists primarily of NGOs, such as Days For Girls and The Pad Project, that play a variety of roles including financing, sourcing, and shipping equipment and materials and providing relevant business trainings. These groups were seen supporting both disposable and reusable pad manufacturers in Asia and Africa. The second type of cottage industry support group includes a sub-set of the small-scale disposable pad machine manufacturers seen in Asia, including Saral Designs and Aakar Innovations. While some machine manufacturers only sell (and potentially maintain) their machines, others engage with the cottage industry manufacturers who use their machines in a more sustained relationship. This could include regular machine maintenance, relevant business trainings, and sourcing and shipping raw materials. Both types of support groups may also provide branding and/or use the cottage industry manufacturers as small-scale franchises.

Downstream Business Models – Distribution

Downstream models include traditional distribution approaches used for a wide variety of fast-moving consumer and pharmaceutical goods deployed by large-scale importers and distributors. Importers and/or distributors sell into a wide network of wholesalers in urban and semi-urban areas, who then sell to retailers including pharmacies, drug shops, grocery stores, small shops, and informal stalls.

In addition, two other distribution business models stood out as unique and/or innovative for the MH market, consistent across countries, and significant for future investment and intervention. Described in more detail in Table 3, they are:

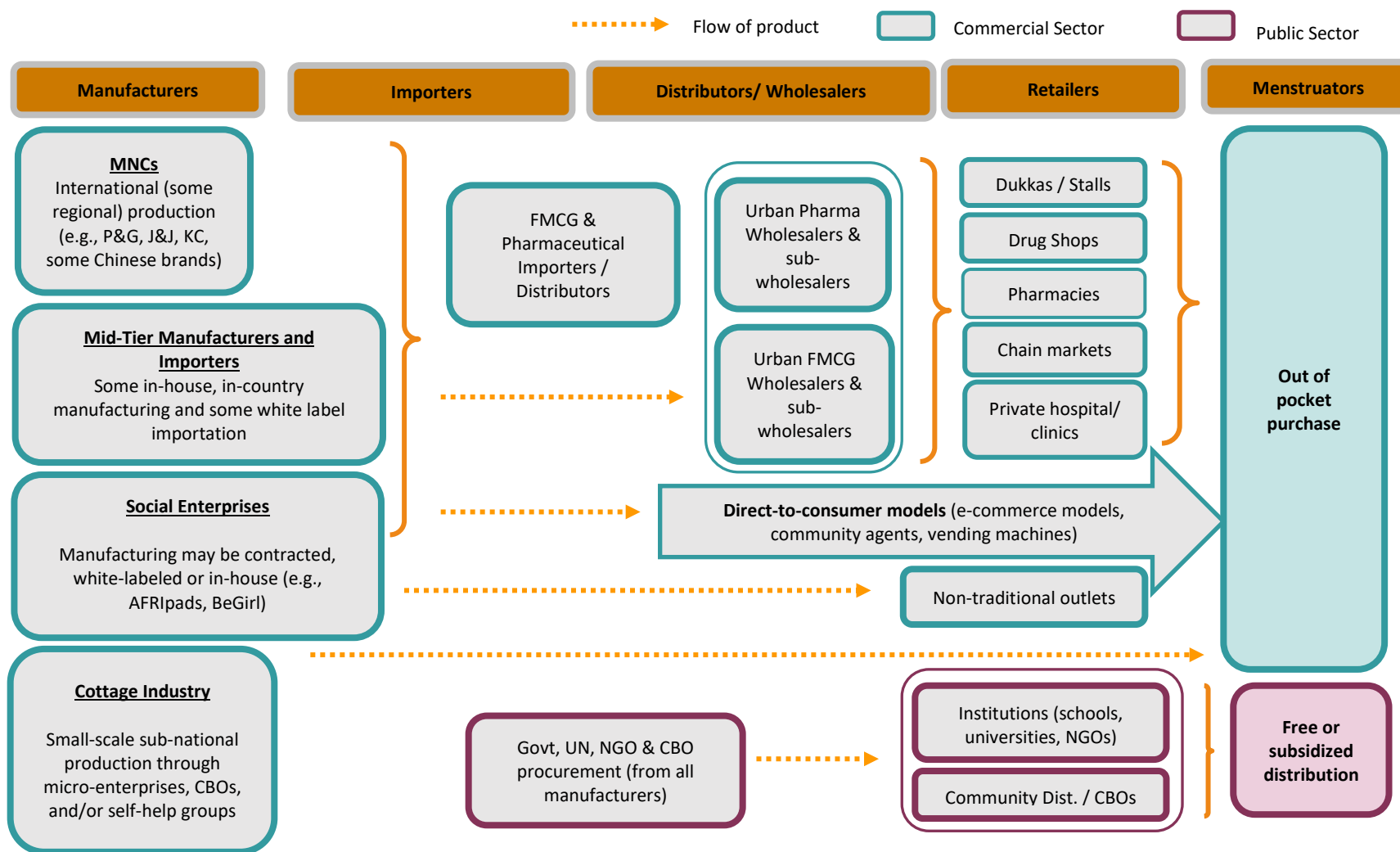
- ❖ Direct-to-consumer distribution;
- ❖ Institutional free and subsidized distribution.

Table 3: Downstream MH Business Models – Distribution

Business Model	Product Type(s)	Primary Function	Description/Examples
Direct-to-consumer	All	Distribution bypassing traditional retail outlets	Innovative direct-to-consumer models such as e-commerce platforms (often supported by community agents and static depots in rural and/or low-income areas), community agents, and vending machines. Includes organizations like Kasha and Yz-Me in Kenya, Pad2Go in Nepal, and FlipKart in India. Innovators disrupt existing distribution models to reduce markups and support access through disintermediation, control quality, and support availability and visibility.
Institutional free/subsidized distribution	All	Distribution through institutions, often combined with education/awareness.	Free or subsidized distribution (via cash subsidies/vouchers) in schools and humanitarian settings by governments, UN, or NGOs to meet basic needs. These programs also build much needed education and awareness for new menstruators which can support the overall market.

This analysis of the dominant business models in the MH market globally and across the deep-dive countries allowed us to map out what a typical supply chain for MH products looks like, and to specifically understand the supply chain barriers and opportunities for optimal access to affordable, high-quality MH products at scale. Our mapping of the MH product supply chain is shown in Figure 3.

Figure 3: Market Structure/Supply Chain for MH Products



The specific **supply chains for our four deep-dive countries** looked very similar without many differentiators from the aggregated map presented above. The most significant differences were between India and the three African countries. While all countries had some level of cottage industry manufacturing, these small-scale production units play a greater role in India than they do in other countries, and include production of both disposable and reusables pads. Government-subsidized distribution is more significant and uses a broader range of channels in India. Finally, there are a wider range of mid-tier manufacturers in India, including some FMCG companies that are distributing their own brands of disposable pads through their existing retail distribution channels. Looking at the African countries, direct-to-consumer sales play a smaller role in Tanzania, where e-commerce platforms have faced regulatory roadblocks. Consumer-to-consumer (including multilevel marketing) is most prevalent in Nigeria, but is likely growing in other countries as well.

Photo credit: Knit Together Initiative



VI. Market Functions

Our analysis focused on the supply-side functions that comprise reliable access to and availability of MH products. We considered both core and supporting market functions. **Core functions** were defined as those that were performed by actors in the supply chain to support access to MH products – the 4Ps including Product, Place, Price, and Promotion. **Supporting functions** are factors that enable a healthy MH market, such as information, guidance, financing, coordination, taxation, etc. The definitions of core and supporting functions are described in more detail in Annex 7.

Core Market Function – Product

Insights, challenges and opportunities: Disposable pads are the dominant commercial product, with global brands leading **market share** in most, but not all countries. Mid-tier suppliers – who import, then over-brand locally/regionally or manufacture locally/regionally – also have significant market share. Social enterprises supporting reusable products introduce significant innovation and are beginning to get some commercial traction; a significant portion of their products are provided free or at subsidized prices through institutions. Use and knowledge of reusable products remains low; 3-4% of menstruators were estimated to have used reusable products across our four deep-dive countries.¹³

Full, informed product choice is critical, since menstruators benefit by choosing among a range of options that meet their needs. It is important for decision-makers to understand that there is not one specific product or product type that will meet the needs and preferences of all menstruators. For instance, a small study on menstrual product choice in Kenya found that when 30 disposable pads, two reusable pads, or one menstrual cup were offered at an equivalent price, 51% choose reusable pads, 46% choose disposable pads, and 3% choose the menstrual cup.¹⁴ Several sources also indicate that menstruators often use a variety of products, including both commercial and homemade products, depending on their blood flow and activity, as well as the season (rainy or dry).^{13,15,16,17} For instance, menstruators may use commercial disposable pads at school or work on heavy flow days, and cloth rags at home on lighter flow days. This mixing and matching of product types allows menstruators to manage their menstruation while faced with limited ability to purchase commercial products.

For all product types, **sourcing high-quality raw materials** is a challenge. For disposable pads, wood pulp, the primary absorbent, is produced by a limited number of companies for a diverse

¹³ RHSC, *RH LEAP (Landscape Assessment and Projection of RH Supply Needs)* (2021, Forthcoming)

¹⁴ Sarah Anwar, *Sheosk: A Study on the Importance of Choice in Menstrual Health Products. Case for Her in partnership with Femme International and Echo Mobile* (2018)

¹⁵ *Expanding Access to MH Products for Adolescent Girls and Young Women in Ethiopia* (PSI, 2018)

¹⁶ *Expanding Access to MH Products in India* (PSI, 2018)

¹⁷ International Federation of Red Cross and Red Crescent Societies, *Menstrual Hygiene Management (MHM) in Emergencies: Consolidated Report, Final Report* (March 2016)

range of industries. Wood pulp is packaged in high-density rolls for shipping. It may also be processed into non-woven air laid sheets with super absorbent polymers (SAP) for the ultra-thin disposable pads. Raw materials suppliers (fluff pulp and/or the processed air laid sheets) include Westrock, Domtar, International Paper, Berry Global, Fitesa/Pantex, and Glatfelter. While the MNCs may buy directly from these companies, mid-tier and smaller manufacturers buy the materials from resellers (often located in China and India). Attempts to use locally-sourced alternative materials as absorbents in disposable pads, such as banana fibers and papyrus, appear to be feasible, but thus far not necessarily scalable, with more research needed to better understand their potential for financial sustainability. (See also text box on product innovations.)

For menstrual cups, both the quality and the amount of silicone is essential to a high-quality, comfortable, and leak-proof final product. Sourcing a consistent high-quality supply of medical grade silicone close to manufacturing sites was cited as a challenge to manufacturing menstrual cups in Africa and more widely in Asia. For reusable pads, sourcing fabric to make the pads was also consistently listed as a challenge, especially for high-quality materials for larger-scale manufacturing. While cottage industry manufacturers may buy fabric locally, social enterprises and cottage industry support groups often prefer to import fabric, both for the cost efficiencies and the preference for specific materials.

For all product types, manufacturers cited the need for capital resources to purchase the quantities required for economies of scale. Buying and importing larger volumes of raw materials in a single shipment could potentially allow for lower costs in several ways. First, they may be able to negotiate discounted prices for larger volumes of raw materials. Second, shipping costs may be lower at larger volumes, as a full ocean freight container load is generally the most inexpensive way to transport materials. Finally, each individual shipment has associated costs (e.g., customs, processing, warehousing, insurance) that may be reduced if fewer, larger shipments are used. In addition, to be able to supply institutional procurers, social enterprises and other manufacturers need to be able to quickly access either large volumes of finished products or large volumes of materials that they can quickly turn into finished product. Fulfilling those institutional purchases can be crucial for growing and sustaining an MH product business, not only for the direct financial gain, but also for the product type and brand awareness that is gained through the distribution of their product.

An example of **pooled procurement** of raw materials for several small-scale reusable pad companies in the Pacific region seems promising and could be replicated elsewhere where larger volume purchases could reduce material and shipping costs. In this region, Red Hat Impact, an intermediary firm recruited by Pacific Rise and partners (including the Australian Department of Foreign Affairs and Trade), put together a Trade Financing Vehicle through which they bulk purchase and ship raw materials from China to a warehouse in Australia, and support the pad companies to accurately estimate the volume of material to purchase and to determine the

appropriate payment terms.¹⁸ This type of solution both reduces production costs and improves access to capital for bulk purchases. Similarly, many cottage industries support groups are also already doing some pooled procurement of raw materials to support their manufacturers. For example, Days for Girls supports its micro-enterprises in countries without access to affordable locally-produced raw materials with “drop ships” of production supplies at negotiated rates via their suppliers in China and the US. Similarly, the Pad Project provides local enterprises manufacturing equipment and raw materials via their vendors in India and the UK, if affordable locally-sourced products are not available.

We heard several instances in which the ongoing **COVID-19 pandemic has affected the supply chain for MH products**. One brand owner noted that the COVID-19 pandemic had increased prices and delayed availability of raw materials for their disposable pads manufacturing. Likewise, a menstrual cup brand owner noted that their usual source for medical-grade silicone was sending its entire output towards production of a coronavirus vaccine, forcing them to identify a new supplier for their cup’s production.

As demand and markets for MH products grow, so do the number of manufacturers and the brands and options they support. With that expansion comes **wide variations in quality**. For new products, and menstrual cups in particular, a menstruator’s first experience with a low-quality product may hinder long-term acceptance of the product. For high-profile brands, counterfeit and copycat products are an increasing concern. Poor quality can manifest in a number of production points. Low-quality materials and manufacturing are common concerns for all product types.

The use of potentially harmful additives is a growing concern, and includes both low-cost alternatives to high-quality inputs, and additives and/or treatments for questionable health benefits. Disposable pads are increasingly marketed as having anion, magnetic, infrared and other treatments, which are purported to reduce odors and address various health concerns, despite a lack of evidence.

From the menstruator’s perspective, product design and features can be **determinants of quality**, with size, shape, wings, adhesives, and other factors affecting comfort, ease-of-use, and effectiveness in preventing leaks. And as one manufacturer pointed out, as menstruators in LMICs are likely to be wearing a reusable pad for a longer period of time than menstruators in higher-income countries, the quality of the pad in terms of absorbency, odor, and comfort needs to be equal if not higher to the products available in high-income countries.

Within the MH field, there is a growing focus on developing and enforcing **quality standards**, with efforts often led or supported by national and regional coordinating bodies, such as the African Coalition for Menstrual Health Management. Standards are beneficial not only in ensuring quality products for consumers, but also can facilitate entry of new players and products into market.

¹⁸ Wendy Anderson, *How a unique Trade Finance Vehicle is helping to fill the gaps in Pacific island product deserts* (2021). Retrieved from: <https://thecaseforher.com/blog/derisking-the-pacific-menstrual-health-supply-chain/>

The lack of standards was cited as a factor inhibiting product registration and market entry, particularly in Kenya and Nigeria. As consumer awareness of quality rises, both through the development and dissemination of standards and the entry of new products, this has the potential to influence and improve quality of existing MH products in the market. (Standards are also discussed below under Supporting Functions.)¹⁹

- ❖ In **Kenya**, disposable pads from two large global brands (Always by P&G and Kotex by KC) dominate the market. Mid-tier importers and manufacturers have small but rapidly growing market share. Most of these are imported from China; we found only two disposable pad brands manufactured in Kenya. High production costs were cited as a barrier to increased local manufacturing. Social enterprise models are promising, but face challenges to scale due to limited financing. There are several brands of menstrual cups available, as well as several reusable pad brands. However, these products currently have limited distribution, particularly in Kenya as they await standards finalization and product registration. Consumers are conscious of quality; and a rapidly changing line-up of brands from “suitcase importers” (which are generally imported illegally and hence do not meet established standards) of varying quality limit consumer’s willingness to try new products and brands.
- ❖ In **Tanzania**, the largest market share is held by a locally-owned disposable pad brand importing from China, Freestyle. Using a single distribution company that focuses on low-cost FMCG, Freestyle is widely available in both urban and rural areas across the country at consistent prices. There is only one local manufacturer of disposable pads, Kays Hygiene Limited (see text box). There are several mid-tier importers, plus the MNC brands, Always and Kotex. Menstrual cups have recently been introduced, with one locally-owned company selling cups imported from China (Hedhi Cup by Anuflo Industries). Lunette is also working to begin sales and distribution of their cups in Tanzania. There are limited sales of reusable pads, mostly from cottage industries. Quality is valued among consumers, but there is a lack of clarity on product standards and enforcement. The government is encouraging local manufacturing through tax changes, but other policies and high production costs limit the impact of such measures.

Kay’s Hygiene Products is a local manufacturer of disposable pads in Dar es Salaam, Tanzania. Its brands, Kipepeo and Jassy, are low-cost but have very limited distribution (primarily in Dar es Salaam). The entrepreneur, Khadija Simba, imported a sanitary pad machine from Germany in the 1980’s and continues to import raw materials from Europe. Despite limited capital to expand or upgrade and limited capacity in areas beyond manufacturing, the company has persisted. The Palladium-led Institutes for Inclusive Development (I4ID) program (funded by UKAid and IrishAid) provided support to Kay’s with sales and marketing that resulted in the companies sales volumes increasing multi-fold. Since the project ended, the continued sustainability of the increased capacity is unknown and ongoing sales figures have not been captured.

¹⁹ More information on standards will be available from the forthcoming resource: Joshi S & Mahajan T. (2021). *Development and compliance of standards for menstrual products in LMICs*. Reproductive Health Supplies Coalition. www.rhsupplies.org

- ❖ In **Nigeria**, disposable pads dominate, with global brand Always having the largest market share. Local mid-tier manufacturers (e.g., LadyCare) and Chinese brands (e.g., Longrich, Norland) have growing market share. Some of these brands use additives and are comparatively expensive, but the purported health benefits are aggressively marketed to attract new users. Several brands of menstrual cups and reusable pads are available in the market, but brand owners cite challenges in the product registration process as a limiting factor to new product entry and growth. NGOs and social enterprises are increasingly supporting MH product distribution, especially in response to localized security challenges. In some cases, these distribution programs are partnering with local cottage industry manufacturers of reusable pads. A competitive environment (more so than other countries) predominates in Nigeria, which may be due to the lack of a strong MH coalition in the country.
- ❖ In **India**, MNCs that primarily focus on disposable pads dominate the market (e.g., P&G, J&J, and Unicharm brands), but local mid-tier brand owners focused on regional and urban/peri-urban markets are assuming an increasing market share. While there are many disposable pad manufacturers located in India, including some MNC production sites, a tax policy change to zero-rate Goods and Services Tax (GST) for importers has limited local manufacturers and suppliers of raw materials from claiming input tax credit, giving importers a 12% advantage over local manufacturing. There are numerous reusable pad and menstrual cup brand owners operating in India, but these products still represent only a small market share. There is also some product innovation occurring, including the development of compostable products and/or experimentation with locally-sourced raw materials. The presence of cottage industry manufacturing of disposable pads supported by pad machine manufacturers and NGOs also distinguishes the market in India. Across all products, quality is highly varied, but with active efforts to make improvements through updated standards.
- ❖ **Elsewhere in Africa and Asia.** MNCs have made investments in a limited number of countries, but in these countries, they tend to have the largest market share. P&G (Always/Whisper), the largest of the MNCs in terms of MH products, manufactures at large-scale in several countries (India, South Africa, etc.). MNCs invest in countries with infrastructure and growing populations in the middle-income bracket, with a focus on mass-media marketing and corporate social responsibility (CSR) campaigns in which their products are donated through schools. This establishes their brands as aspirational and builds brand loyalty, contributing to their ability to capture market share. Importing, distribution, and sales is primarily managed by traditional FMCG and pharmaceutical distribution channels. **Countries in which MNC brands have the largest market share include India, Kenya, Nigeria, Nepal, and Pakistan.** In **South Africa**, the Lil-lets brand, owned since 2013 by locally-based Premier FMCG and sold in several African countries as well as the UK and other European markets, is the market leader, followed closely by P&G's Always brand.²⁰

²⁰ Euromonitor International. *Sanitary Protection in South Africa [Sample report]*. (March 2021)

Where MNCs have not invested, **mid-tier brands** are often predominant. In **Bangladesh**, a local manufacturer, Square Toiletries, has an estimated 65% share of the market.²¹ In **Ethiopia**, two brands – one locally manufactured, and one imported from China – control the market.²²

Countries with market share data are likely to be those with significant MNC presence, as it is the MNCs, and/or companies interested in selling data to those MNCs, that have assessed market share. In a few other countries where MH markets have been studied, i.e., Bangladesh, Tanzania, and Ethiopia, mid-tier companies have the largest market share. We thus posit that in many other low-income countries, where MNCs have not yet invested, market dominance is held by mid-tier companies.

Highlighted Product Innovations

Biodegradable single-use pad

- ❖ The market leader in Bangladesh, **Square Toiletries**, has partnered with a Dutch firm, TNO, to replace plastic aspects of their disposable pad with a biodegradable material made from potatoes. Promoted as fully compostable, this product is not yet for sale. It is supported by Dutch NGO, Simavi.
- ❖ A UK-based social enterprise **Planera** is testing a plant-based flushable single-use pad.
- ❖ **Aakar Innovations** in India makes Anandi Pads, which are made with locally-sourced agri-waste, and certified as both fully compostable and organic.

Disposable pads with local materials

- The Rwanda-based social enterprise behind **SHE pads**, made with banana fibers, struggled to develop a product that met users' need at a sustainable and scalable level.
- **Makapads**, made with papyrus and paper waste in Uganda, appear to be acceptable, but are manufacturing-intensive, thus challenging to scale.
- **Valorigo**, a recent Congolese start-up, makes disposable pads with local bamboo, designed to be biodegradable.

Antimicrobial products

- **The BFree cup**, designed by WGH, undergoes a physical process to be antibacterial, making boiling water sterilization unnecessary.
- Real Relief, produces **SafePad™**, a reusable pad that undergoes a treatment that enables the pad to kill bacteria and other microbes for a “safe and infection free” experience.
- Unicharm's **Sofy** brand in India, offers a antibacterial disposable pad that is marketed as “no worry of smell”.

²¹ Rossouw L., Ross H, *An Economic Assessment of Menstrual Hygiene Product Tax Cuts* (2020)

²² S Rosenberg, P Aylward, et.al. *Expanding Access to MH Products for Adolescent Girls and Young Women in Ethiopia*. (PSI/BMGF, Oct 2018)

Considerations Regarding Product Specific Options

- ❖ **Cotton versus synthetic reusable pads.** While some reusable pad companies prefer fast-drying synthetic materials (e.g., BeGirl, AFRIPads); others prefer cotton for its natural feel (e.g., Days for Girls). Most cottage industries working with support groups and social enterprises are importing cotton and/or synthetic fabrics, rather than sourcing locally. For menstruators using reusable pads, there are little data available on material preferences.
- ❖ **Environment-friendly pads.** While environmental concerns are generally limited to high-end consumers, awareness and interest in these products is growing, especially in Asia. Single-use pads designed to be compostable and/or biodegradable are under development, but with mixed quality and feasibility for composting/biodegrading outside controlled environments. Both the costs of product innovation and the reliable supply and storage of compostable/biodegradable raw materials presents challenges.
- ❖ **Use of additives.** Several brands of disposable pads (e.g., Longrich, Norland, Lady Anion) contain additives or have undergone treatments that reportedly alleviate menstrual cramps and have other health benefits. These claims are unproven – and the additives and treatments may even be harmful – but are contributing to increasing market shares for these products. These ‘enhancements’ currently support higher price points and are heavily promoted.
- ❖ **Super-thin versus traditional disposable pads.** MNCs and many mid-tier brands have started offering super-thin disposable pads in the last decade. These pads, made with SAP, are generally more expensive as they require manufacturing upgrades and higher-cost raw materials. At least one social enterprise believes that the quality of these super-thin pads is not superior to that of traditional pads in ways that matter most to the menstruators in their local context.

Core Market Function – Place

Insights, challenges and opportunities: MH products are broadly accessible at retail outlets in urban areas. Urban areas have significantly higher availability compared to rural areas, especially for reusable products. MH products are typically stocked and sold at a variety of outlets including pharmacies, drug shops, grocery stores, and other small stores and informal stalls that sell similar FMCG.

In-country distribution of disposable pads is generally inefficient. Products are bulky and take up cargo space in transport and shelf space in shops and stalls. This contributes to high transportation costs and low margins along the supply chain that ultimately impact the retail price. Traditional FMCG and pharmaceutical distribution channels are fragmented with several actors handling the products from manufacturer or importer to distributor, wholesaler, and retailer – often with little value added for the margin they charge. Fragmented distribution contributes to a limited line of site and inhibits a brand owner to manage to recommended retail prices. Given the stigma associated with menstruation, along with the low awareness and limited

affordability of, and thus low demand for, MH products in rural areas, distributors along the supply chain can be reluctant to promote or prioritize MH products. Stock-outs of MH products have also been cited as a barrier in some countries, including Nigeria and Ethiopia, often linked to broader currency fluctuations.²³

We saw a few examples of local mid-tier brand owners who are successfully able to sell their products at consistent prices across urban and rural areas. In Tanzania, Freestyle-branded pads reportedly have a **well-managed distribution channel**, offering promotions and incentives in exchange for price adherence. This combination of geographic reach, consistent pricing, and supply on shelves have contributed to their ability to lead market share. Square Toiletries in Bangladesh, a local mid-tier manufacturer, has become the local market leader with wide distribution and consistent pricing. In Bangladesh, however, there are maximum retail price caps that are set by the brand owner and enforced by the government and tax policies that serve to advantage Square Toiletries.²⁴

Looking beyond MH, donors such as the United States Agency for International Development (USAID), Children's Investment Fund Foundation (CIFF), and BMGF have recently emphasized engagement of private sector actors to increase equitable access to other affordable, quality health products and services through targeted subsidies within supply chains. These interventions address stock and inventory financing through credit provision to retailers, pay-as-you-dispense financing, and brokering payments of cash-strapped retailers. Inventory management tools to help ordering, re-supply, and stock provision are also promising models seen in other health areas. While MH products are not generally included within the basket of goods considered for these supply chain interventions, there is potential for them to be included in the future.

The **I4ID project** in Tanzania undertook a multi-year effort to support MH product access. One of the project's more successful efforts involved supporting brand owners and importers to better manage distribution channels by utilizing regional sales agents to develop stronger relationships with distributors and retailers. These efforts were partially designed to mimic the successful distribution that the local market leader, Freestyle, is able to maintain. One large-scale importer that worked with I4ID was so impressed with the viability and profitability of rural distribution that it decided to replicate similar efforts in other markets, including Cameroon.

Within our analysis, we saw two types of **distribution innovations**:

- ❖ MH brand owners experimenting with product distribution through non-traditional (non-FMCG and pharmaceutical) channels and outlets; and
- ❖ MH brand owners leveraging distribution innovations in the market.

²³ Rosenberg, S, P Aylward, K Little and MC Punzi, F Getachew Desta, R Seleshi, and E Mebrate, *Expanding Access to MH Products for Adolescent Girls and Young Women in Ethiopia* (Population Services International, 2018)

²⁴ Rossouw L., Ross H, *An Economic Assessment of Menstrual Hygiene Product Tax Cuts* (2020)

Some of the most promising broader approaches, both specific to MH products and in the broader market, use **direct-to-consumer channels**. Among the MH brand owners, social enterprises are particularly engaged with experimentation and innovation to take greater control of distribution and ensure affordability. Acceptability of new distribution channels will likely vary by product type, population, and other contextual factors, and as such additional analysis is needed to determine how viable these models are at scale.

E-commerce platforms that allow online sales directly from manufacturers or importers to consumers are gaining traction across most LMICs. While the traditional models cater to high-income populations with reliable internet access and urban addresses for easy delivery, many of these e-commerce platforms are innovating to be able to serve a wider clientele that include low-income and rural consumers. Kasha, an e-commerce platform focused on health and beauty products in Rwanda and Kenya, offers its full line of products via its online store and a selection of its most popular and low-cost products via a phone messaging platform for consumers without internet access. Kasha, and several other e-commerce platforms, also engage **community agents** and/or use **static depots** (e.g., lock boxes) to distribute purchases to consumers. Customers can choose the agent or depot closest to their location and pick up their purchase from that location. Kasha reports that community agents also support the education and consumer follow-up required for new products and allows purchases to be made through a trusted representative. Jumia, one of the largest e-commerce platforms in Africa, operates in several countries and sells a range of products, while Copia, in Kenya and Uganda, has community agents who place orders and serve as delivery points for consumers. Small shop and stall owners may also bypass traditional distribution channels to purchase products for re-sale from the e-commerce platforms.

Vending machines represent another growing direct-to-consumer approach. Several social enterprises supporting MH vending machines were identified in Kenya, Tanzania, and India, serving both higher-income populations in shopping malls and universities (e.g., Yz-Me), schools, and low-income neighborhoods and informal settlements (e.g., EsVendo). Regardless of machine placement, by selling individual units, these machines make MH products more accessible to cash-constrained menstruators. Vending machine business strategies includes sponsorship and/or sales or rental of the machines, as well as of space on the machine (and/or embedded screens) for educational information and advertising. While vending machines offer a promising approach to reach menstruators in particular high-need settings, they are unlikely to become a major distribution channel for MH products.



A consumer purchasing MH products from a Yz-Me vending machine in Kenya

Non-traditional channels and outlets have been tested by several social enterprises. While some have found these approaches too challenging as they require “re-training” menstruators on where to shop for MH products, others are finding success with this approach. For instance, BeGirl distributes and sells its period panties through a chain of fashion stores that operate in several urban areas of Mozambique. However, there does not yet appear to be a specific non-traditional distribution channel that is most promising. Experimentation with “**piggy-backing**” distribution of MH products with other goods has been attempted with Tanzania Breweries Limited, Eveready East Africa (batteries) in Kenya, and Living Goods in Uganda and Kenya, but has not been sustained. For example, at Living Goods, community health workers are incentivized to prioritize reaching health targets (e.g. assessing sick children under-five, supporting pregnant people, etc.), rather than selling MH products for a marginal profit, particularly since the start of the COVID-19 pandemic. They still carry both disposable and reusable pads, but have very limited sales during their door-to-door visits. Discomfort with purchasing MH products from male community health workers (who form 32% of Living Goods cadre) is also a barrier.

A number of attempts have been made to distribute and sell MH products through other **SRH distribution channels**. MH brand owners in the social enterprise model have occasionally partnered with private sector health clinics, including franchised clinics supported by social marketing organizations (SMOs), to sell their products. For instance, MSI Reproductive Choices clinics in Nepal and Uganda and MSI community agents in Uganda and Zambia have distributed and sold MH products. These small-scale experiments have not been successful enough to gain traction and be replicated widely within MSI. Some brand owners felt the sales of their products through these channels were modest and/or lacked promise. A small study in Uganda, however, found that using MSI community agents to sell menstrual cups was a successful approach, as the agents were known and trusted in their communities and able to offer the related education and support needed for successful menstrual cup adoption.²⁵

India appears to be the only LMIC in which the national ministry of health has engaged in MH product distribution, supporting free and subsidized distribution through schools and through community agents (accredited social health activists, ASHAs) in select districts.^{26,27} This program has since been transitioned to state-level management with national-level funds available. Ministries of health in other countries have been engaged in MH markets in related ways, including with product standards and registration, national-level policies, and working groups.

Finally, in most LMICs, we see **free or subsidized distribution** programs. Depending on the context, they are funded and/or managed by governments, NGOs, social enterprises, MNCs, UN agencies, and other institutions. They may be short-term, providing only a sample of products, or long-term. For instance, several countries have established policies to provide MH products

²⁵ *Menstrual Cup Market Accessibility Project (MCMAP) Evaluation Report* (Womena, 2020)

²⁶ Bhattacharya S., Singh A., *How effective is the Menstrual Hygiene Scheme? An evaluation study from North India* (International Journal of Community Medicine and Public Health, 2016)

²⁷ Muralidharan A., et al, *Unpacking the policy landscape for menstrual hygiene management: implications for school WASH programmes in India* (Waterlines, 2015)

free in schools. These policies, however, have not always been adequately funded. Distribution programs are also common in refugee and humanitarian settings, occasionally using vouchers or cash transfers rather than actual product donations. (See text box for more information on UN procurement.)

Free and subsidized distribution programs, especially those targeted to schools, are generally viewed favorably. For most of the small manufacturers and social enterprises that supply the large volumes for these programs, these institutional level sales are critical to their financial sustainability. These programs are often paired with important education and stigma-reduction efforts, create product and brand awareness, and do not typically undercut or distort the market in a significant way.

We came across limited reports of market distortion.²⁸ In one example, a free distribution program undercut simultaneous efforts to support reusable pad micro-entrepreneurs in Timor L'este.²⁹

In March 2021, **UNFPA and UNICEF** released a joint tender for the procurement of disposable and reusable pads and menstrual cups under global long-term agreements for UN programs and third-party clients. An important milestone, the tender included technical specifications that have the potential to serve as a global reference for product quality standards. The tender also represents a shift in how UN agencies source MH products towards international procurement directly from manufacturers and suppliers. This creates new opportunities for brand owners, including social enterprises, to expand the reach of their products and the scale of their business. As the results of this tender are finalized and it is utilized as a procurement mechanism, it has the potential to impact both global MH markets and local markets where procured products are distributed.

- ❖ In **Kenya**, FMCG and pharmaceutical distribution channels still offer the most effective and sustainable distribution. E-commerce models are gaining traction for all products. These platforms are important for reusable products; due to pending product standards, reusable products not currently available on retail shelves. Innovations such as vending machines are growing but face challenges to scale. Government, MNC, and other institutional distribution programs play a significant role.
- ❖ In **Tanzania**, distribution is occurring almost entirely through traditional FMCG and pharmaceutical channels and outlets. E-commerce does not appear to be well established in Tanzania. Free and subsidized distribution programs play a smaller role than other countries due to limited government involvement and limited CSR programs by MNCs.
- ❖ In **Nigeria**, outlets served primarily by traditional FMCG and pharmaceutical distribution channels, especially in rural and low-income areas, face stock-outs and limited brand availability. E-commerce is gaining traction in urban areas, with multiple competing enterprises pursuing this approach; however, they appear to be less established than in

²⁸ Australian Aid, Criterion Institute, MH Hub, Pacific Rise, *Unlocking the opportunity in the Pacific menstrual health market: Lessons learned from a workshop of menstrual health actors working in the Asia-Pacific region* (Nov 2018)

²⁹ Hobday, K., *GAP Endline Evaluation: Keeping girls in School through improved reproductive and menstrual health* (MSI, Wateraid, 2021)

Kenya and India, particularly for MH products. Consumer-to-consumer (including multilevel marketing) is a growing trend in Nigeria and seems to be more popular there than in other countries studied. Numerous, diverse free and subsidized distribution programs are scattered across the country.

- ❖ In **India**, penetration of MH products has increased significantly with strong investments from MNCs and regional brands in sales and distribution. However, access in rural areas remains a challenge as MH products are limited to 30% of the penetration of food products. A recent innovation to improve last-mile access – retail entrepreneurs using agents (e.g., tailors, stalls, etc.) to expand community retail points – is gaining some traction. E-commerce is steadily growing. Vending machines have created a market in institutions such as universities, health facilities, transit facilities, factories, etc. Government and MNC-funded school-based free distribution programs are widespread and are creating demand for products in rural areas.

Core Market Function – Price

Insights, challenges and opportunities: Our analysis found that the **main drivers of price** for MH products are raw materials and distribution, with significant outlays required for cost of manufacturing. Interviews indicate that cost of goods sold (COGS) contribution for small- and large-scale production can vary considerably. Table 4, below, breaks down estimated COGS for small- and large-scale production. Percentages should be considered as a range. Profit margins for large-scale production can vary from 25% for low-end products to 60% for high-end premium products, and are reportedly less for small-scale production. In India, raw materials account for about 25% of the end user price of disposable pads, with wood pulp (mostly imported) accounting for 35-40% of those raw material costs. Distribution and marketing costs contribute an additional ~35% to the end user.

Table 4: Disposable pad price break down

COGS	SMALL-SCALE PRODUCTION	LARGE-SCALE PRODUCTION
MATERIALS (OF WHICH PULP/PULP PRODUCTS MAKE UP 50-75%)	~25%	~50%
LABOR	~60%	~30%
ALL OTHER (FIXED AND VARIABLE OVERHEAD, MARKETING, TRANSPORTATION, ETC.)	~10%	~20%

As noted above, **raw materials** are difficult to obtain close to the markets in which finished products are sold. Several of the smaller manufacturers noted that their prices could be lower if they had greater capital resources and the ability to project future sales volumes in a way that would enable them to order and ship raw materials at larger scale with lower costs. Larger volumes would better enable these manufacturers to fulfill institutional orders from NGOs, governments, and UN agencies for free and subsidized distribution programs, while lower retail prices could help to address some of the latent demand in the market.

High manufacturing and production costs contribute to high retail prices, both in terms of initial equipment and ongoing costs for electricity, labor, and maintenance. Most companies that make disposable pad manufacturing equipment are located in China, with a few in India and Europe. Shipping these machines to Africa is capital intensive and once there, the technical know-how for maintenance is sometimes lacking, with repairs manuals available only in Chinese and spare parts unavailable. For profitability, the machines need to have high levels of output and to run almost constantly; machine breakdowns or power outages can thus be costly. Some stakeholders also cited high labor costs, but this varies by context. For example, in India relatively cheap labor is available, and raw material and distribution costs are bigger barriers, whereas in Kenya, high labor costs are a factor that contributes to most MH products being manufactured outside Kenya.

Upgrades to newer and/or large equipment may lower prices. One menstrual cup brand owner said that a larger mold, which could make four times more menstrual cups per batch, would significantly reduce their cost of goods sold and enable them to sell their product at a lower price.

Distribution costs also contribute significantly to consumer price. As explained above, most finished MH products are bulky and take up significant shipping and storage/shelf space. The inefficient and fragmented distribution channels also result in retail prices above those recommended by the brand owner or importer. Prices tend to be consistent in chain stores and more formal retail outlets, with variable prices in smaller shops and informal stalls.

Data on **distribution margins** at the various stages of the supply chain was challenging to access, both because of the reluctance of actors to disclose financial information and the inability to visit wholesale and retail points in person due to COVID-19 restrictions. We did see a great variation in pricing, but with generally low margins compared to other FMCGs. Margins also appeared to be lower on disposable pads than on reusable products as reusables tend to be slower-moving and more expensive; consumers are less familiar with these products and as they last for several years, they are not an ongoing purchase. As trade and retail margins determine whether products get retail shelf space, low margins on MH products can limit their availability.

This downward demand cycle is described in a report by PSI as “many retailers don’t stock because there is no demand for product, and there is no demand for product because there is no supply.”³⁰ Experience with other product categories indicates that as initial demand picks up, actors will enter the market with new products to address that demand, increasing choice supporting user demand, and hence reversing the cycle. This trend has occurred with condoms, family planning products, and other health FMCG products. As markets mature, it can be expected that the range of products they carry will increase – although rural markets may be on the tail end of this trend. In the past, social marketing was sometimes seen as the catalyst to ‘prime’ the market by creating initial demand for a product. (This also sometimes prohibited market entry because of market distorting subsidies on price.)

³⁰ PSI, *Expanding Access to Menstrual Hygiene Products for Adolescent Girls and Young Women in Ethiopia* (Washington, D.C.: PSI; 2018)

Several of the stakeholders that we interviewed stated that typical disposable pad (and some reusable pad) **pack sizes** are too large to be affordable to cash-constrained menstruators. As mixed product use is common, a menstruator may use only a few commercial disposable pads per menstrual cycle, but most pads are sold in packages of 8-10. While a few brand owners are beginning to sell smaller pack sizes, this appears to be a missed opportunity to reach the lower-income brackets. Meanwhile, vending machines, discussed above, that sell individual pads offer a promising approach to serve cash-constrained menstruators.

Several in-depth analyses on MH product **tax reform** have recently been disseminated.^{31,32} From the recently completed analyses, we learned that when taxes and/or tariffs on MH products are removed or reduced, the result is not necessarily a reduction in retail price, especially in markets with limited competition where the manufacturer or retailers absorb excess profits. Without enforcement and rigorous evaluations of tax changes, such efforts to increase affordability will be further hampered. Tax reforms to encourage local manufacturing have also been attempted, but again with mixed results. In Bangladesh, tax changes did not have an effect on end user price, and instead contributed to the market dominance of one manufacturer. In India, a tax policy change to zero-rate GST for importers has limited local manufacturers and suppliers of raw materials from claiming input tax credit, giving importers an approximately 12% advantage over local manufacturing. However, campaigns to reduce/eliminate taxes are still deemed important for increasing awareness of menstrual needs. They can also contribute to longer-term gender equity goals, and if implemented in a targeted manner with enforcement and evaluation, have the potential to lower retail prices.

Most of the **social enterprises** with products in the MH market balance financial sustainability (profitability) and ensuring a wide range of menstruators have affordable access to their products through cross-subsidization approaches or targeted leveraging of subsidy. In some cases, institutional sales (primarily to donors and governments who procure product for free distribution) may subsidize commercial sales to support affordable prices. Many social enterprise models focus on gaining traction in urban, wealthier customers first, to create financial viability within their commercial arms, while also supplying partners for free distribution. Affordability to the lowest income brackets is still a challenge. While some social enterprises (e.g., BeGirl) have one brand across both their institutional and commercial arms, AFRipads sells their AFRipads-branded reusable pads to institutions and the So Sure-branded pad in the Ugandan market. Ruby Cup has sought to balance profit and access via their buy-one-give-one approach (mostly in higher-income countries) which pays for free product donations through partner NGOs in lower-income countries. They also have a wholesale price available to NGOs and other distribution partners in lower-income countries who want to sell the menstrual cup outside of the buy-one-give-one program. In addition, many of the social enterprises solicit individual donations and grants or contracts for MH and puberty education, research, and/or free or subsidized

³¹ Laura Rossouw, Hana Ross. BMGF, *An Economic Assessment of Menstrual Hygiene Product Tax Cuts* (Sep 2020)

³² Ina Jurga, Marc Yates, Sarah Bagel. WASH UNITED (PATH/RHSC), *What impact does a VAT/GST reduction or removal have on the price of menstrual products?* (July 2020)

distribution of their product, which may also subsidize their commercial sales and/or support financial sustainability.

Our analysis revealed a few examples of **vouchers or cash transfer** to support MH product access. In humanitarian settings, UNFPA and UNHCR have used vouchers and cash transfers and see these approaches as potentially preferable to product donations but seek additional research to better understand the advantages and disadvantages of the product, voucher, and cash options. In South Africa, the MENstruation Foundation have begun installing disposable vending machines in schools that work with tokens, given to the schoolgirls on a monthly basis. In India, the Bihar state government is offering a cash incentive of INR800 (~\$10) per year to adolescent girls contingent on school attendance as part of a broader conditional cash transfer program. Again, limited evaluation of these programs has been undertaken.

- ❖ In **Kenya**, affordability remains a large barrier. Kenya has supported multiple rounds of tax reform, but with little documented impact on retail price. Production costs in-country are high, and this has resulted in a preference for white label importing. Retailer margins on products are 16-20%, and wholesaler margins are between 5-10%.
- ❖ In **Tanzania**, the market leader, Freestyle, is able to ensure consistent pricing across urban and rural areas. Others struggle to get out of urban areas, especially with affordable pricing. VAT on MH products was reduced, and then reverted a short time later when no immediate price reduction was seen. Tax changes to support in-country manufacturing were recently instituted. Similarly, a price cap for MH products was explored, but was not determined to be feasible. Retailer margins are between 30-40% and wholesaler margins are between 9-16%.
- ❖ In **Nigeria**, inflation and exchange rates in Nigeria are affecting the market for imported goods broadly, including MH products. Import duties are also seen as a contributor to higher prices. In 2019, VAT on locally-manufactured pads and tampons was removed, but there are very few locally-manufactured brands, and this policy is thought not to have made an impact on consumer price. The registration process is cumbersome and had inhibited introduction of new products/brands into market. Affordability remains a large barrier.
- ❖ In **India**, the market is highly price-sensitive and competitive, and most users can afford disposable products (except the very bottom of the pyramid). Disposable products are available across price points with variations in product features and quality. Costs include transportation (6-10%) and distribution margins (35-40%). Recommended retail prices (RRPs) are generally followed by retailers. Reusable products have highly variable pricing due to lack of information on grades/quality. Local manufacturing costs are lower than in other countries studied.

Core Market Function – Promotion

Insights, challenges and opportunities: A **lack of education and awareness** is cited as one of the biggest challenges with the MH market. This lack of education and awareness is inherently tied to the stigma and taboo related to menstruation, which makes talking and learning about menstrual needs and MH products challenging for menstruators. It also means menstruators may

be hesitant to purchase MH products, especially if the shopkeeper is a male. Menstrual stigma and taboos can also affect other aspects of the market, with actors reluctant to engage in promotion and other efforts related to MH products.

Menstruators, especially in rural areas, are often unaware of the options available to them to manage their menstruation. Limited access to and experience with various options means that they may also be unaware of the variations in quality that can make a specific product type and brand a valuable product – or not. Even if they are aware of the options and desire to make a purchase, they may be constrained because they do not control financial resources in their household. Non-menstruators may not understand the need for MH products and older menstruators who have relied on homemade products may not find commercial products to be of enough added value to warrant a purchase.

The lack of education and awareness combined with stigma and taboo mean the market is challenged by **significant latent demand**. In LMICs, even in countries where high percentages of menstruators report having used commercial MH products, they are using far fewer products per cycle/year than menstruators in higher-income countries. This means that there remain significant gaps between current volumes of MH product sales and potential product sales. For instance, research from India³³ and Tanzania³⁴ indicate that the current market value represent only between 10-20% of the potential market value. Research has shown that most menstruators, when educated about and offered commercial products, prefer these to homemade products.³⁵ And while affordability remains a barrier in most settings, willingness-to-pay research in Ethiopia showed that menstruators were willing to pay on average more than market prices.³⁶

This **lack of actual demand translates into lack of access**. Several upstream actors in our analysis stated they may be able to convince a downstream partner to carry a product, but that if it did not sell, they would not continue to carry it. Likewise, demand-driven requests for products do pass up the supply chain and can result in new products being sold. Menstruators that are aware of and demand products will prompt retailers to carry a range of products.

While awareness of disposable pads appears to be high in both urban and rural areas, **knowledge of reusable products and tampons** is low, especially outside of urban areas. And while disposable pads require minimal education or support for use, reusables and tampons often require dedicated education and support to allow for confident and appropriate use. For instance, menstrual cups often take a few months of practice to achieve confident use, during which time

³³ Aylward, P., K Little K, V Sharma, M Satpati, A Singh, F Ahmed, M Punzi, S Rosenberg, B Caruso, *Increasing Access to Menstrual Hygiene Products in India: A market development approach* (Population Services International, 2018)

³⁴ Windward Commodities, I4ID project, *A review of the Disposable Sanitary Product market in Tanzania and key considerations for product suppliers* (Mar 2019)

³⁵ Aylward, P, K Little , V Sharma, M Satpati, A Singh, F Ahmed, MC Punzi, S Rosenberg, B Caruso, *Increasing Access to Menstrual Hygiene Products in India: A market development approach*, (Population Services International, 2018)

³⁶ Rosenberg, S, P Aylward, K Little and MC Punzi, F Getachew Desta, R Seleshi, and E Mebrate, *Expanding Access to MH Products for Adolescent Girls and Young Women in Ethiopia* (Population Services International, 2018)

peer support and training can be supportive.³⁷ Education is also required for proper cleaning of reusable products (pads and cups). For insertable products, a lack of understanding of human biology and concerns about virginity among young menstruators means that education on use of the products often also requires broader SRH education.

Many social enterprises and MNC brand owners combine product promotion with broader puberty education targeted at schools. For social enterprises, this is often subsidized through grants or donations, and for MNCs, it can be an important CSR program. These programs are also seen as cost-efficient promotion, even if they include product donations, as they reach eager, captive audiences at a young age, establishing brand awareness and loyalty early. They are also an opportunity to provide the health education and stigma reduction efforts that support the MH product market more broadly.

MNCs, such as P&G, have utilized their strong marketing skills and large advertising budgets to develop mass media campaigns that double as product promotion and CSR, particularly in larger growth markets such as India. For instance, P&G's 2015 "touch the pickle" advertisement won a global advertising award for its efforts to break taboos and stigma around menstruation. Their 2020 advertising campaign to "keep girls in school" included a buy-one-give-one promotion while bringing awareness of menstrual needs to mass media audiences in India.

Outside of schools, most brand promotion targets urban-, middle- and upper-income populations. MNCs are the most likely to invest in mass media advertising, and then only in countries where they see the potential for rapid growth. Some mid-tier brands are also engaging in promotion. Most social enterprises and cottage industries struggle to afford marketing and promotion efforts, and this contributes to the gap in awareness between disposable pads and reusable options. There is also growing recognition that product promotion should not only target menstruators, but also communicate the importance of MH product use to those with financial control within households.

Social media is a growing platform for low-cost promotion. Social media also has the potential to offer a more "personalized" approach, allowing consumers to ask questions and the brand to respond with product information, including availability and pricing. However, menstruators currently seem more willing to engage on social media than brand owners, as seen in Kenya with the

#MyAlwaysExperience, when P&G only belatedly responded to intensive criticism of their product on Twitter. We also saw Nigerian consumers sharing price information and availability



A social media exchange between a consumer and a disposable pad brand in Nigeria

³⁷ Van Eijk, Anna Maria, et al., *Menstrual cup use, leakage, acceptability, safety, and availability: a systematic review and meta-analysis* (The Lancet Public Health 4.8, 2019: e376-e393)

on Twitter, with little response from brand owners. The personalized approach is also seen in the consumer-to-consumer distribution efforts, which rely on word-of-mouth and social media to expand networks.

Aspirational messaging is common, and increasingly includes messages about environmental and personal health. Likewise, some brand owners and suppliers engage in **negative advertising**, in which they detract or denigrate other product types or brands as unhealthy or unsustainable for the environment. Given the overall lack of awareness about menstrual health and the inherent advantages and disadvantages of all product types, this negative advertising likely contributes to confusion among menstruators and potentially hinders the development of the overall market. While some social enterprises and other brand owners are beginning to embrace the importance of full informed choice of products for menstruators, negative messaging is still seen, especially among the more commercially focused actors.

- ❖ In **Kenya**, inadequate education and awareness remains a barrier, but is improving with MH education now included in school curricula under the new menstrual hygiene management policy. MNCs are engaged in mass and social media efforts, with some retail-level promotion by various actors. Social enterprises combine product promotion with education.
- ❖ In **Tanzania**, many suppliers are not investing in promotion and marketing due to a lack of capital and stigma. The I4ID project provided retail-level marketing support to one brand owner, which contributed to steep sales gains during the period of project support. (See text box above on Kay's Hygiene Products.) Lack of awareness and need for intensive education had added to the challenges of introducing menstrual cups. There is very little MH product distribution and/or education for in schools or other settings.
- ❖ In **Nigeria**, awareness of MH products, especially reusables, continues to be a challenge. The impact of stigma and taboo on access and use of MH products varies by region. Social media has become a significant channel for brand promotion, with mass media and word-of-mouth promotion also important. The lack of a strong MH coalition has limited coordinated and nationwide awareness and promotion.
- ❖ In **India**, the majority of efforts around education/awareness are being pushed by MNCs via aspirational product marketing and government, but stigma and taboos remain. Education in schools has been successful at creating long-term users and brand loyalty. Reusable products lack the targeted marketing push that disposable products have, and promotional efforts are limited to environmental and health aspects.

Effects of MH product disposal and waste management on access

LMICs generally have weak waste management systems. Investment to strengthen and build these systems are greatly needed and should be advocated for. However, we feel it is not appropriate to place the burden of managing waste on the shoulders of individual menstruators.

While bringing attention to the environmental concerns associated with disposable (single use) products may help menstruators make choices about their individual product use in alignment with their own needs, preferences, and values, those concerns also have the potential to further limit access. We have seen several examples in which free, full, and informed MH product access and choice has been limited because of environmental concerns. For example, in January 2021, Mexico City banned the sale of several single-use plastics, including nearly all tampons. Menstruators in small towns and villages in rural areas have been pressured into pledging to only use reusable products in order to certify their community as “100% free” of disposable sanitary pads. And in some cases, social enterprises promoting reusable products also offer puberty education and MH awareness programs with key messages focused on the chemicals in and environmental waste burden of disposable pads.

Ensuring menstruators have a broad range of MH product types and brands not only decreases pressure on individual products to meet the diverse needs and preference of menstruators, it also alleviates the environmental pressure of disposable products. With more information and more choice, menstruators will choose a diversity of products. Product innovation can further expand the range of choices that both meet menstruator’s needs and limit waste.

Finally, offering menstruators full, free, and informed choice of MH product types and a broad range of brands is a matter of human rights and essential to alleviating the gender and economic inequalities that our world faces.

Supporting Market Functions

Supporting Functions describe activities required to indirectly support a market such as national agencies supporting **quality assurance** or **standards**, or **market coordination** functions such as leading and coordinating the players supporting a coherent national program. They also include **financing functions** in a market such as the use of subsidy to actors in the supply chain or for commodities, and the extent to which access to credit and capital is utilized or delivered. Finally, the **rules** environment includes regulations that impact product registration, how products are imported and registered, and taxes (duties, VAT, etc.) imposed on imports and through the supply chain.

Table 5: Insights, Challenges and Opportunities on Supporting Market Functions

Information	<ul style="list-style-type: none"> ❖ In most LMICs, there is a lack of data on MH needs, use trends, prices, options, and the market overall. While survey data on MH needs and use is beginning to increase, commercial market reporting is only available for larger markets and is expensive. ❖ There is a lack of evidence assessing the impact and sustainability of promising market approaches, especially with regards to improving last mile distribution and access. ❖ While there is some consumer-focused MH market data on product acceptability, there is limited data on product awareness, preferences, and willingness-to-pay. ❖ Decision-makers lack evidence-based information on comparative product safety and appropriateness, which is compounded by negative messaging. ❖ As discussed above, a lack of education and awareness, along with stigma and taboo around menstruation, contributes to information gaps at all levels.
Coordination	<ul style="list-style-type: none"> ❖ Where strong MH coalitions exist, the support for advocacy and coordination among actors appears to be important. ❖ Other than social enterprises, commercial actors are not generally engaged in these coalitions. Better coordination among commercial actors could contribute to problem-solving and shared investments. (The Condom Alliance in India is one example of competitive commercial actors coming to together <i>“to coordinate efforts and implement joint activities to revive and expand the condom market by tapping into the business opportunity presented by India’s burgeoning youth population.”</i> https://condomalliance.in/about-us/) ❖ In India, there is a Feminine and Infant Hygiene Association (FIHA), which is intended to coordinate amongst manufacturers in advocacy and related efforts, but is seen as having limited ability and/or effectiveness in playing this role. There is limited overlap between members of the Indian FIHA and the Menstrual Health Association of India (MHA).
Guidance	<ul style="list-style-type: none"> ❖ Development of standards is growing at country-level, within regional bodies, and with the recent release of joint specifications from UNFPA, UNICEF, and UNHCR. In countries where standards do exist, awareness and enforcement are sometimes weak. Disposable pad standards are most common. ❖ Standards are beneficial not only in ensuring quality products for consumers, but in facilitating entry of new players and products into market. While most MH actors saw standards as enabling product entry, there is acknowledge that if not enforced fairly and efficiently, that they can also stifle new product innovation and market entry. ❖ Product registration processes vary by country and by product type. This process was cited as cumbersome particularly where product standards were lacking, such as in Kenya and Nigeria. Most MH products are considered consumer rather than medical products, with the exception of menstrual cups, which are classified as a medical device in a few countries, such as Kenya and the United States.³⁸ ❖ Wider MH policies, which exist in some countries, such as Ethiopia, Kenya, India, Nepal, and Zambia, can also be supportive of market functions. They can raise

³⁸ WoMena, FAQ - Are Menstrual Cups regulated by governments around the world? (WoMena, 2020)

	<p>overall awareness, reduce stigma, contribute to coordination, and often happen alongside other efforts such as improved MH education and/or free distribution in schools.</p>
Quality	<ul style="list-style-type: none"> ❖ As discussed above under Product, quality is an increasing concern and covers low-quality raw materials and manufacturing processes; use of questionable additives and/or treatments; design features (e.g., wings and adhesives). ❖ Consumers value quality highly when they find it, as seen by brand loyalty. And when they experience low quality, they may dismiss that product type entirely. ❖ In addition to standards, new interest in avenues for consumers to report quality issues about products.
Financing	<ul style="list-style-type: none"> ❖ MH has comparatively little interest from funders working in other areas of health. This creates gaps where investments in distribution and supply chains for related health products could also benefit MH products. For instance, some NGO and social enterprise-supported community agent programs include MH products in their basket of goods sold, but because there is not donor interest in those products or sales figures, they are not prioritized within the programs and thus offer little impact. ❖ However, the commercial potential of the MH market presents significant opportunity to spur commercial solutions to increase use. Investments in social enterprises brand owners, distribution efforts, and other actors are increasing. ❖ Many brand owners stated that greater access to capital could reduce manufacturing costs and improve quality, scale, and/or sustainability. See discussion of manufacturing under Product above. ❖ Government, commercial actor, UN, and donor support for free or subsidized product distribution and awareness/education efforts are seen as important elements to strengthening the MH product market.
Labor Capacity	<ul style="list-style-type: none"> ❖ The business of MH product manufacturing, distribution, and sales requires skilled workers. Promising, initial attempts at supporting CBOs and self-help groups with dual purpose investments to support MH access and increase economic opportunities have not appeared to be successful. However, dual-purpose investments do appear successful/sustainable when supported through an entrepreneurial model, in which the stakeholders have specific interest in MH, the skillsets to run a business, and the incentives to pursue opportunities in the face of risks.
Taxes/Tariffs	<ul style="list-style-type: none"> ❖ As discussed above under the section on Price, campaigns to reduce or eliminate taxes and tariffs are effective at increasing awareness about MH and access to MH products. However, reducing or eliminating taxes alone does not necessarily increase affordability for consumers. In some cases, changes may be counterproductive.

Informal Rules

- ❖ As discussed above under the section of Promotion, stigma and norms limiting discussion of menstruation may make acceptance of new products more challenging and limit word-of-mouth marketing.
- ❖ Menstruators have a preference to purchase MH products from female shopkeepers.
- ❖ Insertable products may be perceived as harmful and/or inappropriate for young menstruators.

Examples of MH Investments and Innovative Financing Mechanisms

Many investors and innovative financing mechanisms have been drawn towards the commercial potential of the MH market.

- ❖ Led by the **Pacific Rise** project, several groups came together in 2019 to create a Trade Finance Vehicle (TFV) to support several reusable pad micro-entrepreneurs in the Pacific Region. The project enabled collaboration among the micro-entrepreneurs, while improving their access to credit and de-risking the bulk purchase of raw materials through pooled procurement (see Section VI on Market Functions, Product for more details).
- ❖ **The Case for Her**, a philanthropic investment portfolio based in Sweden and founded in 2016 addresses menstruation through traditional investing, impact investing, and grants funding. The largest funder of MH efforts, they have invested in product brand owners (e.g., AFRipads, BeGirl); distribution partners (e.g., Kasha); education and awareness (e.g., Oky); research (e.g., the Sheosk study on product choice); and the trade finance vehicle mentioned above. They also actively advocate for increased investment in MH.
- ❖ **Kasha**, a women-focused e-commerce platform, launched operations in Rwanda in 2016 and in Kenya in 2018. Kasha has raised over \$12 million in funding, including substantial funding from MasterCard. They also receive grants to support research, subsidized distribution of specific products, and expansion of their community agent model in Kenya. Kasha plans to expand to several additional countries in the next few years and hopes to achieve financial sustainability soon. Kasha is just one of many health-focused e-commerce platforms expanding across Africa and Asia.
- ❖ The **French Development Agency (AFD)** is supporting a \$2.2 million **Development Impact Bond** to support MH work in two regions of Ethiopia, with implementation beginning in 2021 by CARE. Efforts include improving knowledge and changing norms related to MH; working with MH product manufacturers, importers, wholesalers, and retailers; and supporting water and sanitation infrastructure at schools. Plans include distribution of product vouchers and support to a local reusable pad manufacturer, Mariam Seba Products Factory. They also plan to network with actors at various levels of the supply chain to support all types of MH products.

VII. Overarching Recommendations & Specific Interventions

1. Incentivize product choice, which underpins use

Ensuring menstruators are aware of and have access to **full product choice**, which includes a range of product types and brands to meet a menstruator's needs, facilitates use. Expanding choice to include quality and affordable reusable products provides a secondary benefit of alleviating the environmental pressure of disposable pads. At every stage of the supply chain, actors should be encouraged to offer a broad range of product types and brands and discouraged from marketing messages that denigrate other product types. Other product categories, such as contraceptives, have demonstrated not only that increased choice results in increased uptake of the product, but that it also grows the market value and hence opportunities for commercial actors.

Continued investments in the development of **product standards** and their **fair and effective enforcement** is one way to ensure availability of a range of quality, differentiated products. While standards can help to ensure that menstruators have access to quality products, they should not be so stringent as to impede the registration of products that deviate from the "standard", due to innovations and/or alternative designs that allow menstruators greater choice. The development of product standards can reduce the friction created by complex, time intensive and sometimes expensive product registration processes to **enable efficient market entry for new products**.

Incentivizing the design of innovative products presents the opportunity to support even modest improvements that can differentiate products for the diverse needs of menstruators. One example of this is the Bill & Melinda Gates Foundation funding for research into MH product innovations. Entrepreneurial social enterprise models are particularly effective at innovating on product design for both disposable and reusable products, offering women a desirable and attractive product that appeals to their aspirations. Market investments can encourage product improvements by brand owners and manufacturers – incentivizing competition and even copycats in a healthy cycle to grow the total market. A simple innovation for manufacturers to consider is decreasing the number of units in a package to better serve low-income menstruators who can only afford 2-3 commercial disposable pads per cycle.

2. Support market actors to grow scalable, sustainable businesses

Investing in market actors, particularly brand owners and manufacturers operating at a national or regional level, has the potential to spur healthy growth in the MH market and better meet the needs of menstruators. Building on emergent lessons from the development impact bond in Ethiopia and the trade financing program in the Pacific, **innovative financing mechanisms to strengthen local brand owners** can help address the various capital and capacity constraints manufacturers face.

In particular, **investments that shift manufacturing closer to markets** through **financing and incentives** to support the quality, scale, and sustainability of local manufacturers brings the potential to lower transportation costs of bulky finished products and improve distribution efficiency. That potential needs to be realized by access to a reliable source of energy and trained work force, but emergent mid-tier manufacturers do indicate the opportunity for profitable, sustainable manufacturing in Africa. Social enterprise and mid-tier manufacturing that can operate at levels required to drive economies of scale are particularly promising. **Improved coordination** between brand owners and manufacturers, through industry associations or commercial sub-groups of MH coalitions (with support from traditional donors, investors, and/or intermediaries as was seen in the Pacific TFV), could enable experimentation with pooled procurement and joint manufacturing to create economies of scale. For instance, mid-tier local manufacturers could sell their manufacturing capacity, serving as a white label manufacturer for other local brands.

For existing manufacturers, investments in **updated and larger machines and/or molds** can improve quality of production and introduce greater economies of scale, thereby lowering cost of manufacturing and ideally consumer prices. Sustainable solutions with local manufacturing need to include the transfer of technology, including access to parts and know-how to repair machines.

Decentralizing manufacturing will also benefit from intervention by advocates and governments. **Changes to tax and tariff policy** can encourage local manufacturing, but only after analysis indicates the market can benefit from such shifts. Other policy changes to support local manufacturing and related infrastructure needs should also be considered at the policy level.

Investment in manufacturing should focus on **scalable opportunities that are only initiated once financial modeling demonstrates the pathway to viable sustainability**. For instance, the disposable pad machines provided by Saral Designs appears to have the potential to support small-scale, yet efficient production. However, additional analysis is needed to ensure that micro-entrepreneurs with these newer machines do not have the same challenges as those seen with earlier machines that were less efficient. Further, working with individuals, businesses, and/or organizations that bring an entrepreneurial mindset and/or skill sets required to identify and execute on opportunities is more likely to succeed than working with community-based organizations and/or self-help groups.

In addition to manufacturing support, brand owners (including cottage industry manufacturers, social enterprises, and mid-tier actors) could also benefit from targeted **technical assistance in branding, marketing, sales, and distribution** to improve positioning of MH products to retailers, and onward, to consumers. Manufacturers and brand owners could also be encouraged and incentivized to introduce packaging innovations such as smaller package sizes, which would lower out-of-pocket burden, meet the needs of users, and facilitate uptake.

3. Improve distribution to allow for greater access and affordability

Positioning MH interventions in the context of broader donor initiatives presents the opportunity to **leverage other investments to expand access**. While funding for MH interventions is limited, a number of donors including USAID, CIFF, BMGF, and others have recently emphasized engagement of private sector distributors to increase equitable access to a portfolio of affordable, quality products and services (often focusing on SRH products). As an FMCG, MH products are uniquely positioned to capitalize on those investments, such as inventory financing. There are also opportunities to better understand how MH products can be best procured and distributed and/or resourced (i.e., vouchers or cash) within broader humanitarian programs. Coordination and advocacy are needed at the global and national level to have MH products included in the basket of goods supported by broader donor investments.

MH actors can continue to capitalize on and experiment with existing efforts to positively disrupt distribution through approaches such as sales through **direct-to-consumer e-commerce platforms** supported by community agents and depots that expand access to lower-income and rural consumers and use of inventory management tools.

Experimentation with non-traditional distribution outlets and channels, such as through vending machines and/or fashion or beauty stores, is promising and needs to continue with iteration and evaluation to dial in what works. In exploring non-traditional distribution approaches, the impact on margins and consumer pricing requires careful evaluation to determine if they can be replicated and scaled. Successful models may not replicate in all settings or with other products, and so tailored approaches are required. While there is a great deal of interest in and potential for pairing MH products with SRH products and services, as existing small-scale attempts have had mixed results, additional work is needed to identify promising models.

Traditional distribution models have also demonstrated the potential to efficiently reach rural markets with affordable prices, especially as demand grows and is paired with promotion and education. Freestyle in Tanzania and Square in Bangladesh are examples of brand owners deploying efficient supply chain management to cost-effectively create wide-reaching access with consistent pricing. Investments in **efficient supply chain management** to improve adherence to recommended retail pricing while expanding access in underserved areas are still needed. In many cases, brand owners and local importers could be taking a more active role in managing their downstream distribution, getting to know the specific actors in their supply chain and offering promotions, incentives, and consistent supply in exchange for price adherence. Again, given the limited funding available for MH interventions, leveraging complimentary donor investments will be important.

Government policies and regulation that encourage the entry of new products will not only facilitate choice, but also increase competition in the market, which is likely to lower price. Governments should develop policies to ease **new product and brand market entry** while

maintaining a level playing field and assured quality, including **clear standards with easily navigated registration processes**.

Finally, **free and subsidized distribution programs are still needed**. Targeting free distribution to specific populations and needs (such as at schools to introduce young menstruators to the range of products available) can support rather than hinder the wider commercial market. All product types in the market should be included in free distribution programs to ensure menstruators are exposed to a diverse range of products and brands, while also ensuring that those, or similar, products are also available in the local shops for later purchase. This is especially important for reusable and/or insertable products that require education and sometimes even follow-up support on use and cleaning.

4. Support awareness building, demand generation, and the evidence to inform future work

Category-wide promotion and demand generation is needed across regions and particularly in rural areas to catalyze demand and prompt retailers to carry products. Promotion will be most successful when paired with broader education on the body and other SRH topics, including through puberty education programs. While these programs should be implemented in a way that ensures free, full, and informed choice of products, partnerships with social enterprises that have experience in puberty education and product-specific education needs, can be mutually-supportive. Marketing and promotion efforts that denigrate other product types should not be supported.

Promotion and education efforts should also be paired with **community-wide MH stigma reduction** efforts that aim to reduce the taboos around menstruation. These efforts are vital to increasing acceptability of MH product purchases, for menstruators, for retailers, and for the holders of household income who make decisions about purchases. Donors and NGOs can engage with MNCs, local mid-tier manufacturers, and other actors to co-fund mass media campaigns that address stigma, learning from efforts to reduce stigma in related SRH areas especially related to product choice and bodily awareness and autonomy.

Investing in strong **coordination and coalition building across a wide range of actors at the country and regional level** can support such initiatives while maximizing the relative strengths of each partner, filling information gaps, and ensuring scarce donor investments are leveraged. Where strong MH coalitions exist, the support for advocacy and coordination among actors appears to be important. Efforts should also be made to ensure that these coalitions include not only NGOs and CBOs, but also government representation and a range of commercial actors.

The MH sector also struggles with limitations in the data and evidence available to support improved MH product access. While many of our recommendations build on promising approaches we observed, most of these approaches have not been evaluated to assess cost-effectiveness, impact, and overall viability. Other recommendations are based only on the

observed constraints in the MH markets and knowledge of what has worked to improve access to other health products in LMICs. Improved data collection and synthesis and increased evaluation of MH market innovation is urgently needed. Only with such **investments in evaluation and data collection** will we be able to confidently build healthy, sustainable MH markets for all menstruators in Africa and Asia. In particular, there is a need for basic market data from a wider range of countries, such as product range, prices, usage rates, and availability. Evaluations are needed to better understand how supply chain innovations impact access and affordability. And more research and data are needed from the menstruator perspective, including on product awareness, preference, and willingness-to-pay.



Photo credit: Jonathan Torgovnik/Getty Images/Images of Empowerment

VIII. MH Market Intervention Framework

The **MH Market Intervention Framework** aims to support donors, governments, manufacturers, distributors, and other community actors in selecting and prioritizing interventions that address key country-level constraints and build strong MH markets. It first offers users a simple approach to rapidly assess the maturity of a country's MH market. Based on that assessment, it then helps users to assess the relevance of pre-identified market interventions to improve access. It also links recommendations to actors in the supply chain and/or overarching market functions. The framework highlights programmatic elements that support the development of a strong, functioning MH market. Its development was informed by our global analysis and country-specific deep-dives in India, Nigeria, Kenya, and Tanzania, as well as feedback from stakeholders.

Origins of the MH Market Intervention Framework

Menstrual health markets are uniquely suitable for market shaping interventions. They are characterized by vibrant private sector participation by multiple actors, relatively well-targeted free distribution, and low levels of donor funding – all of which enhances the need for sustainable solutions that can scale. The MH Market Intervention Framework draws on key elements from other market shaping frameworks in global health, including USAID's Center for Innovation and Impact work; the Springfield Centre's Market Shaping Primer; PSI's Keystone Framework; and the BioPic Framework developed by the Clinton Health Access Initiative.

As a first step in using the framework, users assesses the relative MH market maturity of their targeted country. The **MH Market Maturity Rapid Assessment Tool**, found in Annex 1, provides information on how a country is performing against a standardized set of programmatic elements and in relation to other countries in sub-Saharan Africa and Asia.³⁹ Market maturity is defined by a qualitative assessment of performance against the essential building blocks of a healthy, mature market. The following elements are included in the assessment:

- ❖ **Market fundamentals** that build the enabling environment for strong MH markets, including: the presence of an MH coalition and coordination of market actors; strength of government engagement; development and enforcement of product quality standards; existence of MH policies at a national levels; and favorability of the tax environment;
- ❖ **Market environment** including the strength and presence of MH social enterprises; mid-tier and local manufacturers; and MNCs.
- ❖ **Market breadth and depth** factors that look at the health of market, including the range of MH products and price points, the distribution reach (place), and the types of promotion, including education and awareness efforts.

³⁹ Because it builds from our analysis in sub-Saharan Africa and Asia, this tool was specifically designed to be applied in those regions.

- ❖ **Macro factors**, including the GDP per capita and MH commercial product use rates, as these factors can provide useful information about the level of latent demand and potential future growth in market value and volume.

While this tool aims to provide guidance in assessing a market's maturity, the assessments will remain subjective; they can, however, still be helpful to understand how a country is performing and in prioritizing relevant interventions. And if repeated over time, the framework can also be used to benchmark the country against prior performance and gauge market maturation.

The **MH Market Intervention Framework**, shown below in Figure 4, then helps users select and prioritize market interventions based on market maturity and other variables. MH market maturity, as assessed using the tool, forms the **Y axis** of the framework. The other variables in the framework, found along the **X axis**, are:

- ❖ **Market functions** critical to a healthy market include the important elements underpinning the ecosystem of use. These functions are those that generally exist outside of the supply chain. They are instead under the purview of the national government or led by NGOs, funders, and/or other community actors. As they are also the building blocks of a healthy MH market, interventions that align to this section of the X axis have some overlap with the market fundamentals in the MH Market Maturity Rapid Assessment Tool.
- ❖ **Actors in the supply chain**, including manufacturers, importers, distributors, wholesalers, and retailers, support the flow of MH products to menstruators and are thus an important variable in the framework. The strengths and weaknesses of these market actors present constraints and opportunities for market interventions.

The final framework variable is the **recommended interventions**, which align to the recommendations outlined above. The interventions are plotted on the MH Market Intervention Framework, drawing on the market function and/or actors in the supply chain that the specific intervention is targeting, and the relative market maturity of the specific country. While some of the interventions, such as stigma reduction and category-wide demand promotion, will likely require long-term and potentially even ongoing efforts, the design of the framework allows for interventions to be plotted in a logic order or sequence.

Sequencing of interventions is aided by the recognition that less mature markets will require initial investments to address 'lower hanging fruit' – these interventions are populated at the top of the framework. As those more fundamental elements of a health MH market are improved upon, interventions can then shift to address constraints and opportunities in more mature markets – which appear lower on the framework. In this example, also numbered on the framework below:

- 1 The development and **fair enforcement of product standards**, has been found to ease the registration of new product, and is thus required to...
- 2 **Support new product/brand entry.** Once new products begin to enter the market and a robust level of competition exists, changes to the tax environment are more likely to reduce retail prices. As such, it is a good time to begin advocacy in favor of...
- 3 **Favorable tax policies**, which if designed appropriately, can create a greater opportunities and a more level playing field for local manufactures. With a level playing field set to grow existing markets, investments can then...
- 4 **Support local manufacturing**, or investments to bring manufacturing closer to markets and menstruators, which has the potential to lower transportation costs of bulky finished products and improve distribution efficiency.

Not all investments are dependent on such sequencing, but in general, strengthening the fundamentals of a market can then set the stage for more sophisticated investments generally found in more mature markets.

Building from the MH Market Intervention Framework, **Table 6**, below, further links **recommended interventions to potential funders, implementers, and beneficiaries**. This table is designed to further enable donors, governments, manufacturers, distributors, and other community actors to apply the specific investments for action to their specific role.

- ❖ **Potential funders** include traditional donors such as private foundations, philanthropists, governments and UN agencies; innovative financing mechanisms include bringing together private debt and equity-blended finance with traditional donor investments and FemTech funders; MH coalitions, including industry coalitions using their membership fees; or investments by market actors themselves.
- ❖ **Recipients or implementers of funding** may be market actors or may manage funding on behalf of market beneficiaries. Market facilitators/intermediaries are independent third parties with the skills, resources and experience to coordinate investments across multiple partners to support identified interventions. The facilitator/intermediary role could be played by an NGO, consultancy group, or industry coalition. SMOs have also played a coordinating intermediary role in the past as well.
- ❖ **The identified beneficiary** of investment is one of the upstream or downstream business models identified in this report, such as mid-tier manufacturers, social enterprises, or direct-to-consumer distributors.

Figure 4: MH Market Intervention Framework and Recommended Interventions

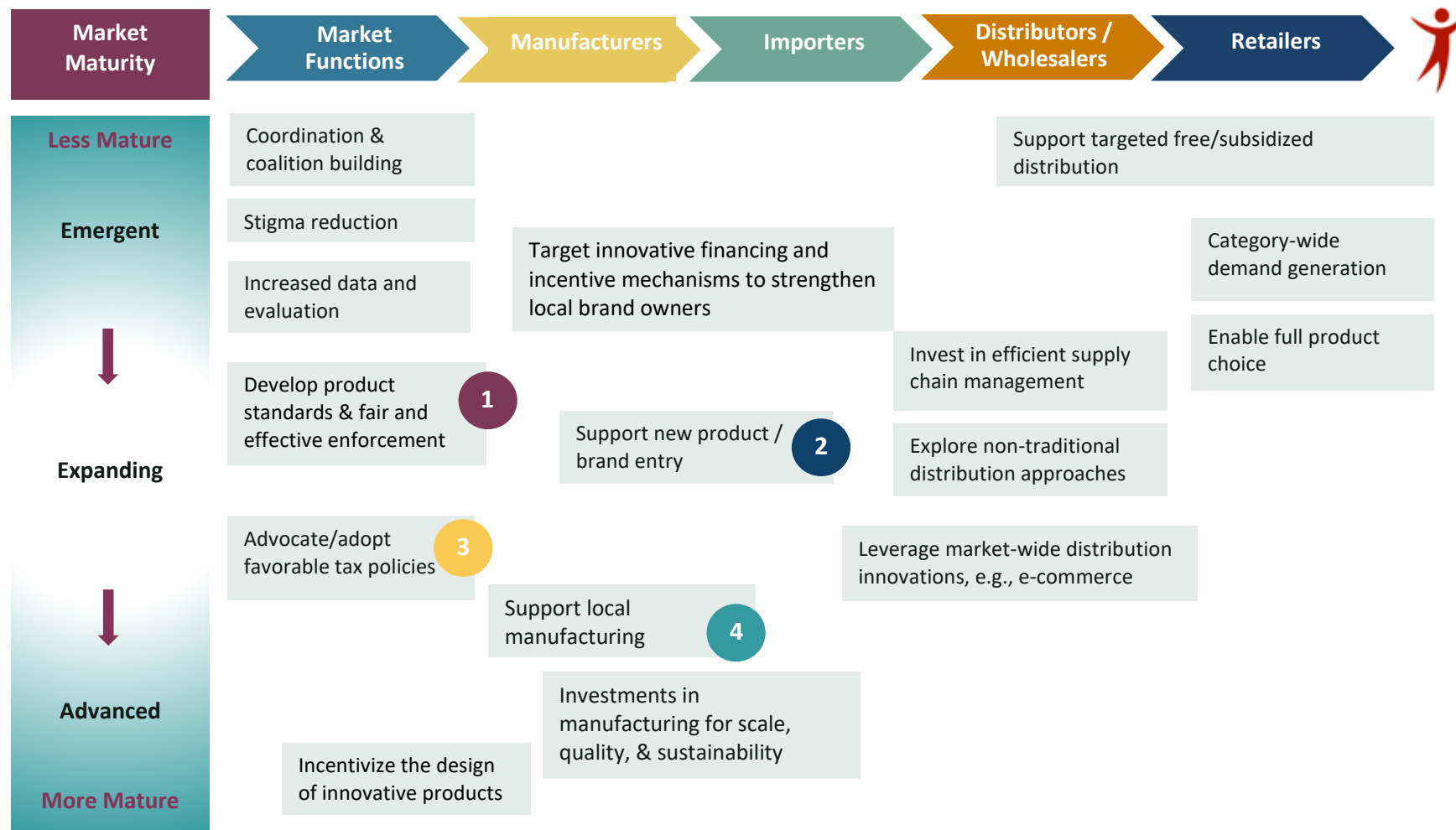


Table 6: Linking recommended interventions to funders, implementers and beneficiaries

Overarching Recommendation	Recommended Interventions	Funder	Recipient/Implementer of Funding	Beneficiary Business Model
INCENTIVIZE PRODUCT CHOICE, WHICH UNDERPINS USE	Develop product standards and their fair and effective enforcement	<ul style="list-style-type: none"> • Governments • Traditional funders 	Governments	<ul style="list-style-type: none"> • Cottage industry manufacturers • Social enterprises • Mid-tier manufacturers & importers • MNCs
	Incentivize the design of innovative products	<ul style="list-style-type: none"> • Traditional funders • Market actor self-investment • Innovative blended finance mechanisms 	<ul style="list-style-type: none"> • Social enterprises • Mid-tier manufacturers 	<ul style="list-style-type: none"> • Social enterprises • Mid-tier manufacturers
	Ensure menstruators are aware of and have access to full product choice	<ul style="list-style-type: none"> • Traditional funders • Innovative blended finance mechanisms 	<ul style="list-style-type: none"> • NGOs/SMOs • Governments • Market facilitators/intermediaries • Distributors 	<ul style="list-style-type: none"> • All business models
SUPPORT MARKET ACTORS TO GROW SCALABLE, SUSTAINABLE BUSINESSES	Target innovative financing and incentive mechanisms to strengthen local brand owners to address the various capital and capacity constraints manufacturers face	<ul style="list-style-type: none"> • Traditional funders • Innovative blended finance mechanisms 	<ul style="list-style-type: none"> • Market facilitators/intermediaries • Social enterprises • Mid-tier manufacturers and importers 	<ul style="list-style-type: none"> • Social enterprises • Mid-tier manufacturers and importers
	Improved coordination between brand owners and manufacturers through industry associations or commercial sub-groups	<ul style="list-style-type: none"> • MH coalitions • Traditional funders 	<ul style="list-style-type: none"> • MH coalitions • Market facilitators/intermediaries 	All business models
	Support local manufacturing , including investments in updated and larger machines and/or molds, to improve quality of production and introduce greater economies of scale	<ul style="list-style-type: none"> • Traditional funders • Innovative blended finance mechanisms • Business model self-investment 	<ul style="list-style-type: none"> • Social enterprises • Mid-tier manufacturers 	<ul style="list-style-type: none"> • Social enterprises • Mid-tier manufacturers

	Invest in favorable changes to tax and tariff policy	<ul style="list-style-type: none"> • MH coalitions • Traditional funders 	<ul style="list-style-type: none"> • Advocacy groups • MH coalitions • Market facilitators/Intermediaries 	All actors
	Technical assistance in branding, marketing, sales, and distribution to improve positioning of MH products to retailers and consumers	Traditional funders	Market facilitators/Intermediaries	<ul style="list-style-type: none"> • Cottage industry manufacturers • Social enterprises • Mid-tier manufacturers and importers
IMPROVE DISTRIBUTION TO ALLOW FOR GREATER ACCESS AND AFFORDABILITY	Position MH interventions in the context of broader investments and innovations to expand access/distribution	<ul style="list-style-type: none"> • Traditional funders • Innovative blended finance mechanisms 	<ul style="list-style-type: none"> • Market facilitators/Intermediaries • All brand owners 	<ul style="list-style-type: none"> • Distribution innovators • Social enterprises • Mid-tier manufacturers and importers • MNCs
	Experiment with non-traditional distribution outlets and channels , such as vending machines and/or fashion or beauty stores	<ul style="list-style-type: none"> • Traditional funders • Innovative blended finance mechanisms 	<ul style="list-style-type: none"> • Social enterprises • Mid-tier manufacturers and importers 	<ul style="list-style-type: none"> • Distribution innovators • Social enterprises • Mid-tier manufacturers and importers
	Invest in efficient supply chain management to improve adherence to recommended retail pricing while expanding access in underserved areas	Traditional funders	<ul style="list-style-type: none"> • Distribution innovators • Social enterprises • Mid-tier manufacturers and importers • MNCs 	<ul style="list-style-type: none"> • Distribution innovators • Social enterprises • Mid-tier manufacturers and importers • MNCs
	Develop policies to ease new product and brand market entry while maintaining a level playing field and assured quality, including clear standards with easily navigated registration processes	<ul style="list-style-type: none"> • Governments • MH coalitions • Traditional funders 	Governments	All actors
	Free and subsidized distribution programs are still needed ; target free distribution to specific populations and needs (such as at	<ul style="list-style-type: none"> • Traditional donors • Governments 	<ul style="list-style-type: none"> • Governments • NGOs • Civil society 	<ul style="list-style-type: none"> • Cottage industry manufacturers • Social enterprises

	schools to introduce young menstruators to the range of products available)			<ul style="list-style-type: none"> • Mid-tier manufacturers & importers • MNCs
SUPPORT AWARENESS BUILDING, DEMAND GENERATION, AND THE EVIDENCE TO INFORM FUTURE WORK	Category-wide promotion and demand generation is needed across regions and particularly in rural areas to catalyze demand and prompt retailers to carry products	<ul style="list-style-type: none"> • MH coalitions • Traditional funders • MNCs 	<ul style="list-style-type: none"> • MH coalitions • NGOs/SMOs • Market intermediaries/facilitators • Brand owners 	<ul style="list-style-type: none"> • Cottage industry manufacturer • Social enterprises • Mid-tier manufacturers and importers • MNCs
	Promotion and education efforts should also be paired with community-wide MH stigma reduction efforts that aim to reduce the taboos around menstruation	<ul style="list-style-type: none"> • MH coalitions • Traditional funders • MNCs 	<ul style="list-style-type: none"> • MH coalitions • NGOs • Market intermediaries / facilitators • Brand owners 	<ul style="list-style-type: none"> • Cottage industry manufacturer • Social enterprises • Mid-tier manufacturers and importers • MNCs
	Invest in data collection , synthesis and increased evaluation of MH market innovations	<ul style="list-style-type: none"> • MH coalitions • Traditional funders 	<ul style="list-style-type: none"> • Industry coalition • NGOs/SMOs • Market intermediaries/facilitators 	All actors in market

Annex 1: MH Market Maturity Rapid Assessment Tool

Elements	Country Assessment	Explanation
Market Fundamentals		
Coalition/Coordination: An active MH working group (coalition) exists and meets regularly. A range of commercial actors (product suppliers, distributors) are actively engaged in a coalition sub-group or other coordinating body.		
Government Leadership: There is at least one clear MH focal point within the national government and coordination across ministries and departments. The MH working group has active participation from national government representatives.		
Standards/Registration: Product standards exist and are available for disposable pads, reusables, and cups. There is awareness and fair enforcement of product standards. Registration of new products has a clear process and does not limit product breadth.		
Policy: A current national MH policy or plan exists and is actively used for program planning. The current national MH policy/plan includes a section on increasing product access, affordability, quality, etc.		
Tax environment: A review of tax policies relevant to MH product has been conducted and/or progress towards tax reform has begun. National tax policies are supportive of MH product access.		
Market Environment		
Social enterprises: Presence of social enterprises working on MH product access from a variety of angles/product types. Locally-based social enterprises have sustained business for 5+ years and scaled beyond national boundaries.		
Mid-tier and local manufacturers: Presence of mid-tier companies doing local manufacturing, and the market share manufactured locally.		
MNCs: Presence of MNC brands officially distributed/sold in country, along with local company representation to support distribution, marketing, etc.		
Market Breadth and Depth		
Product and price: A range of price points and product variants including product types, brands, package sizes, and price points commercially available.		
Place: The extent to which MH products are accessible including whether product availability extends to remote, rural areas.		
Promotion: Brand owners and other actors along the supply chain actively promote their products.		

Macro Factors		
GDP per capita		
% of menstruators who have used commercial MH product		
Overall		
Summary score		
Possible Scores		
<ul style="list-style-type: none"> • Not yet present or not enough information • Emergent • Expanding • Advanced 		

Annex 2: Finding Answers to Strategic Questions

1. What is the **overall structure of the MH market** (including volume, price, quality, product choice, market value, size and potential growth?)

The mapping of the supply chain, found in Section V. Business Models and Market Structure provides an overview of the market structure. Additional data on volume, value and potential growth, as it was available, is in Section IV. Market Trends and Topline Findings. Price data collected during our country deep-dives are also available under Section IV.

2. What factors **impede access** for affordable, quality MH products at different points along the supply chain?

Our analysis found that availability, affordability, and awareness were the three overarching factors that impede access to MH products, creating barriers both individually and in relation to one other. In Section VI. Market Functions, the sub-sections on Product and Place discuss the availability of quality products in more detail, while the sub-sections on Price and Promotion provide additional context on affordability and awareness.

3. What factors **impact price** for affordable, quality MH products at different points along the supply chain?

As discussed in Section VI. Market Functions, under the sub-section on Price, raw materials, distribution, and manufacturing are the major drivers of MH product cost, with location of manufacturing and type of distribution affecting the relative size of those and other factors.

4. How is access affected by **product options** and innovations?

As discussed in Section VI. Market Functions, under the sub-section on Product, consumer research shows that menstruators require and use a variety of products to meet their individual needs and preferences. They make purchases based on price and quality, including product features that determine comfort, effectiveness, and ease-of-use, while also considering environmental and personal health. Additional considerations related to specific product options are covered in a text box.

5. What are the high potential **business models to scale and improve access**?

In Section V. Business Models and Market Structure, we describe the business models used by brand owners and manufacturers, as well as the specific distribution-based business models. Within Section VII. Recommendations, we discuss areas in which we believe these business models offer potential for expanding MH product access.

Annex 3: Literature Review Documents

1. PSI Europe, 50 Forward, Simavi, The Case for HER, Wash United, Global Menstrual Collective. *Making the Case for investing in Menstrual Health and Hygiene (MHH)*. Jan 2021.
2. UNFPA ESARO. Siri Tellier and Maria Hyttel, WoMena. *Menstrual Health Management in East and Southern Africa: a Review Paper*. 2017
3. Anna Maria van Eijk et.al. *Menstrual cup use, leakage, acceptability, safety, and availability: a systematic review and meta-analysis*. July 2019. Lancet Public Health 2019; 4: e376–93.
4. Laura Amaya, Jaclyn Marcatili, Neeraja Bhavaraju. FSG, BMGF. *Advancing Gender Equity by Improving Menstrual Health: Opportunities in Menstrual Health and Hygiene*. April 2020.
5. Alexandra Geertz, Lakshmi Iyer, Perri Kasen, Francesca Mazzola, Kyle Peterson. FSG, BMGF. *An Opportunity to Address Menstrual Health and Gender Equity*. May 2016
6. Anne Cabrera-Clerget, Brooke Yamakoshi. *UNICEF Guide MH Materials*. 2019
7. Laura Rossouw, Hana Ross. An Economic Assessment of Menstrual Hygiene Product Tax Cuts. Gates Open Res. 2020;4 doi: 10.21955/gatesopenres.1116672.
8. Bryn Welham. WOW, UKAID. *Taxes and duties for sanitary products in Africa*. May 2020
9. Ina Jurga, Marc Yates, Sarah Bagel. WASH UNITED (PATH/RHSC). *What impact does a VAT/GST reduction or removal have on the price of menstrual products?* July 2020
10. Ina Jurga. WasH United, GHV, RHSC, Period Tax. *Period Tax Presentation: Menstrual Product Tax & Assessing Impact & Action*. Nov 2020
11. Tanya Mahajan. *Imperfect information in Menstrual Health and the role of Informed Choice*. Indian Journal of Gender Studies 26(1&2) 59-78, 2019.
12. Arundati Muralidharan, Hemalatha Patil, Sweta Patnaik. *Unpacking the policy landscape for menstrual hygiene management: implications for school WASH programmes in India*. Waterlines Vol. 34 No. 1. 2015
13. A Geertz, et al. FSG/BMGF. *Menstrual Health in India / Country landscape Analysis*. May 2016.
14. A Geertz, et al. FSG/BMGF. *Menstrual Health in Ethiopia / Country Landscape Analysis*. May 2016.
15. Aylward, P., K Little, V Sharma, M Satpati, A Singh, F Ahmed, M Punzi, S Rosenberg, B Caruso. *Increasing Access to Menstrual Hygiene Products in India: A market development approach*. Population Services International. 2018.
16. S Rosenberg, P Aylward, et.al. *Expanding Access to MH Products for Adolescent Girls and Young Women in Ethiopia*. Population Services International. Oct 2018.
17. UNICEF. *MHM in Ethiopia: National Baseline Report from 6 Regions of Ethiopia*. May 2017
18. Windward Commodities, I4ID project led by Palladium. *A review of the Disposable Sanitary Product market in Tanzania and key considerations for product suppliers*. Mar 2019.
19. Marianne Liyayi, Sachin Gupta. BEAM Exchange; I4ID project led by Palladium. *Better menstrual health: lessons from a market systems approach in Tanzania*. Aug 2020
20. Patrick Aylward et. Al. PSI Market Report slides "Increasing Access to Menstrual Hygiene Management products". July 2018
21. Supriya Garikipati. University of Liverpool. *The future of periods can now be sustainable and cheap*. June 2020
22. WaterAid/India. *MHM: Informed Product Choice and Disposal*. May 2019
23. I4ID Menstrual Product Distribution Proposal. 2019
24. Kayja Brama, JC Sohlenk. GIZ. *Technology Applicability Framework / TAF Assessment Low-Cost Sanitary Pad Machine*. Aug 2019

25. Australian Aid, Criterion Institute, MH Hub, Pacific Rise. Unlocking the opportunity in the Pacific menstrual health market: Lessons learned from a workshop of menstrual health actors working in the Asia-Pacific region. Nov 2018
26. Lucy Wilson. RHSC Kathmandu MH Meeting. Presentation titled “Similarities and differences between MH and RH products”. Mar 2019
27. Sarah Anwar. *Case for Her in partnership with Femme International and Echo Mobile Sheosk A Study on the Importance of Choice in Menstrual Health Products*. 2018
28. Maria Carmen Punzi and Mirjam Werner. Challenging the Menstruation Taboo One Sale at a Time: The Role of Social Entrepreneurs in the Period Revolution
29. Masih A Babagoli et. al. Columbia, SIPA, CEPA. *The Cost-Benefit and Cost-Effectiveness of Providing Menstrual Cups and Sanitary Pads to Schoolgirls in Rural Kenya*. June 2020.
30. Sudip Bhattacharya, Amarjeet Singh. How effective is the Menstrual Hygiene Scheme? An evaluation study from North India. *International Journal of Community Medicine and Public Health*. Sep 2016
31. Muthusamy Sivakami et.al. Effect of menstruation on girls and their schooling, and facilitators of menstrual hygiene management in schools: surveys in government schools in three states in India. *Journal of Global Health*. 2015
32. Marianne Kjellén et. al. SEI. Global Review of Sanitation System Trends and Interactions with Menstrual Management Practices: Report for the Menstrual Management and Sanitation Systems Project. 2011
33. M Hagander, S Velin. Lunds University. Identifying and Addressing the Challenges of Mainstreaming the Menstrual Cup in Uganda. 2017
34. UNICEF & CRS. Menstrual Hygiene Management: Practices, perceptions, and barriers in the Democratic Republic of Congo. 2018
35. PATH, WaterAid, DevSolutions, WSSCC, Zariya. MHA Technical Briefs: Pushing the Boundaries on the MHM dialogue in India
36. Jahangir A. et. al. Womena/RHSC. Menstrual Cup Market Accessibility Project (MCMAP) Evaluation Report. May 2020
37. Karki, K. B. et. al. PSI/Case For Her. MHHM in Nepal: Scoping Review and Preliminary Mapping
38. Singh, G. et. al. PSI with Neilson. Market landscaping of MHHM products in Nepal. Dec 2017
39. Menstrual Hygiene Management Development Impact Bond in Niger and Ethiopia: Framing Document for the call for proposals to service providers. AFD, KOIS. Feb 2020
40. Siri Tellier, Hanna Hidenbrand, and Andisheh Jahangir. Womena FAQ: Are Menstrual Cups regulated by governments around the world? June 2020.
41. Innovations in Health Product Distribution in Sub-Saharan Africa. Market Intelligence Report. Salient Advisory. May 2021.
42. Wendy Anderson. De-risking the Pacific Menstrual Health Supply Chain. Case for Her. 2021. Retrieved from: <https://thecaseforher.com/blog/derisking-the-pacific-menstrual-health-supply-chain/>
43. Better menstrual health for women and girls in Tanzania: Outcome Story. Palladium.
44. Building Resilient SRH Supply Chains During Covid-19 and Beyond. JSI/RHSC. 2021. www.rhsupplies.org
45. Yingzhi Yang. China made 85 billion sanitary pads but not one tampon. Here’s Why. LA Times. 2016. Retrieved from: <https://www.latimes.com/world/asia/la-fg-china-tampons-20160318-story.html>
46. Sophie Elmhirst. Tampons Wars: The Battle to overthrow Tampax. The Guardian. 2020. Retrieved from: <https://www.theguardian.com/society/2020/feb/11/tampon-wars-the-battle-to-overthrow-the-tampax-empire>

47. Josephine Christopher. Why e-commerce giants exit Tanzanian market. The Citizen. 2020. Retrieved from: <https://www.thecitizen.co.tz/tanzania/news/business/-why-e-commerce-giants-exit-tanzanian-market-3226666>
48. Alisha Sijapati. This social business is challenging menstrual discourse. Kathmandu Post. 2019. Retrieved from: <https://kathmandupost.com/escalate/2019/06/09/this-social-business-is-challenging-the-menstrual-discourse>
49. Sangeeta Tanwar. Indian women in smaller cities are buying more tampons and menstrual cups, thanks to online shopping. Scroll.In. 2019. Retrieved from: <https://scroll.in/article/929030/indian-women-in-smaller-cities-are-buying-more-tampons-and-menstrual-cups-thanks-to-online-shopping>
50. Linda Scott, Paul Montgomery, Laurel Steinfeld, Catherine Dolan, Sue Dopson. Sanitary Pad acceptability and sustainability study. University of Oxford. 2013.
51. Karen Hobday. GAP Endline Evaluation: Keeping girls in School through improved reproductive and menstrual health. MSI & WaterAid. Feb 2021.
52. Hilda Alberda. Ritu Programme: Improving menstrual health of girls in Bangladesh. Final Report 2016-2020. Simavi. Aug 2020.
53. Lauren Isaacs. Cape Town Girls' Home Hopes To Expand Sanitary Pad Vending Machine Initiative. Eyewitness News. Apr 2021. Retrieved from: <https://ewn.co.za/2021/04/14/ct-girls-home-hopes-to-expand-sanitary-pad-vending-machine-initiative>
54. UNFPA, UNICEF, UNHCR. UNFPA Invitation to Bid For the Supply of Menstrual Health Management Products. May 2021
55. Siri Tellier, Hanna Hidenbrand, and Andisheh Jahangir. Womena FAQ: Are Menstrual Cups regulated by governments around the world?. Womena. June 2020
56. AFD, KOIS. Menstrual Hygiene Management Development Impact Bond in Niger and Ethiopia: Framing Document for the call for proposals to service providers. Feb 2020.
57. Ina Jurga. Policy landscape for menstrual hygiene and health. WASH United. May 2019. Retrieved from: https://menstrualhygieneday.org/wp-content/uploads/2019/08/MHM-Policy-Overview_WASHUnited_MHDay.pdf
58. Joshi S & Mahajan T. (2021). Development and compliance of standards for menstrual products in LMICs. RHSC. Forthcoming on www.rhsupplies.org.
59. RHSC. (2021) RH LEAP (Landscape Assessment and Projection of RH Supply Needs). Forthcoming on www.rhsupplies.org.

Annex 4: List of Key Informant Interviews

Informant	Organization	Informant	Organization
Global Key Informants			
1. Nancy Muller & Tanya Mahajan	RHSC MH Co-chairs	11. Patrick Alyward	(former) PSI
2. Nicole Bellows & Michelle Weinberger	Avenir Health	12. Deepika Rana	Pad Project
3. Michael Moscherosch	Johnson & Johnson	13. Colin Godborge	KOIS
4. Alan Boyce	(former) Proctor & Gamble	14. Maria Carmen Punzi	(former) PSI MH Lead; completing PhD on MH social enterprises
5. Wendy Anderson & Cristina Ljungberg	The Case For Her	15. Elisabeth Zambelis	Just a Cup/MHM Solutions
6. Sophia Grinvalds	AFRIpads	16. Alexis Heaton	JSI
7. Diana Sierra & Tatiana Reyes Jove	BeGirl	17. Sachin Gupta and Rahma Rahim	Palladium, I4ID Project, Tanzania
8. Haley Millet	Days for Girls	18. Adrian Dongus, Danielle Jurman, Elizabeth Abraham, Maria Spinaki	UNFPA, UNHCR
9. Natacha Mugeni & Patrick Russell	Kasha	19. Amaia Arranz	Ruby Cup
10. Valentine Adolphe	(former) MH Lead, CARE France	20. Leisa Heirtz	WGHI/BeFree Cup
Key Informants in Kenya			
1. Ivy Kimani	Procter & Gamble	10. Josephine Namage	Busia retail shop owner
2. Kevin Achieng & Ben Mado	Kimberly- Clark	11. Edna Wanjala	Dagoretti Corner Total Petrol Station
3. Joana Bischel	Kasha	12. Kelvin Kiprotich	Kiambu County Kiosk
4. Emily Wanja	Emitrican Enterprises Ltd. (exclusive Shuya franchise)	13. Janet Mule	Kenya MOH
5. Ebby Weyime	Grace cup	14. Martin Muchangi & Dennis Munai	Amref Kenya
6. Linda Njeru	Yz-Me International	15. Janet Mbugua & Neville Okwaro	INUA Dada (Mbugua) and consultant (Okwaro)
7. Dego Mohamed	Ankara Wholesalers-Eastleigh	16. Catherine Wajoya	Genesis Care
8. Henry Lusaka	Cleanshelf Supermarket	17. Charles Kinyua Gichuki	(formerly) KimFay East Africa
9. Nancy Keli	Charzel Pharmacy		

Key Informants in Tanzania			
1. Khadija Simba	Kays Hygeine Ltd.	7. Severine Allute	ToneHai
2. Anna-Kaisa Kahkola	Lunette Menstrual Cup	8. Robert Mussa	National Institute for Medical Research
3. Hamri John	Small Kiosk	9. Flora Njelekela	Anuflo Industries
4. Haroun Musse	Stardust Enterprises	10. Store Manager	Shoppers Supermarket
5. Donald Masawe	Small Kiosk	11. Juma Hassan	Small kiosk
6. Hyasintha Ntuyeko	Kasole Secrets Ltd.		
Key Informants in Nigeria			
1. Victor Chisom Ukaegbu	Coux Pharmacy	7. Sarah Kuponiyi	Alora Reusable
2. Jagat Suvarna	Angels Secret	10. Fatima Ibrahim	Norland
3. Olumide Akingbehin	Virony	11. Blessing James	Longrich
4. Genevieve Flight	Sheba Moon	12. Mercy Agbata	Olive Press
5. Mohammad Imam	Promise Cup	13. Nkasi Nebo	PeachAid Medical Initiative
6. Julian Joshua	Noble Women Int.	14. Dr. Ugochi Ohajuruka	HAFAI
Key Informants in India			
1. Lara Gulia	Tata Trusts	8. P&G Middle East Representative	
2. Jinoj K	Wager Hygiene	9. K. Sivanathan,	Growbuy Enterprises
3. Richa Singh	Niine	10. Sanjay Singh	Wholesaler for Niine
4. Jaydeep Mandal	Aakar Innovations	11. Shankar Narayanan	PSI India
5. Nirav Modi	Dima Products	12.. Arundati Muralidharan	WaterAid
6. Priyanka Jain	Hygiene and You	13. Nelson Deb	EcoHub
7. Suhani Mohan	Saral Designs		

Annex 5: Country-Specific Findings

Kenya

Approximately 87% of Kenya's 14 million menstruators are estimated to have used a commercial MH product. Most menstruators, 82%, use disposable pads, with reusable product use estimated at 4% of menstruators. The current estimated value of the MH market in Kenya is \$207 million, and it is projected to grow to an estimated \$234 million, assuming access to MH products remains at status quo. The market consists of approximately 1.8 billion disposable pads, 2.8 million reusable pads, and 8,500 menstrual cups sold per year.⁴⁰

Our assessment identified at least 25 brands of disposable pads, seven tampon brands, and five menstrual cup brands available on the market. Reusable pads are made by BeGirl, Padmad, and several cottage industry manufacturers. Disposable pads ranged from \$0.32 to \$2.76 (4-20 pack); tampons from \$2.23 to \$4.92 (16 pack); and menstrual cups from \$19.50-\$27.86.⁴¹

Product

Disposable pads from two large global brands (Always by P&G and Kotex by KC) dominate the market. Mid-tier importers and manufacturers have small but rapidly growing market share. Most of these are imported from China; we found only two disposable pad brands manufactured in Kenya. High production costs, especially for labor, were cited as a barrier to increased local manufacturing. Social enterprise models are promising, but face challenges to scale due to limited financing (e.g., ZanaAfrica). There are several brands of menstrual cups available, as well as several reusable pad brands. However, these products currently have limited distribution, particularly in Kenya as they await standards finalization and product registration. Consumers are conscious of quality; and a rapidly changing line-up of brands from "suitcase importers" (which are generally imported illegally and hence do not meet established standards) of varying quality limit consumer's willingness to try new products and brands.

Place

FMCG and pharmaceutical distribution channels still offer the most effective and sustainable distribution. E-commerce models are gaining traction for all products. These platforms are important for reusable products; due to pending product standards, reusable products not currently available on retail shelves. Innovations such as vending machines are growing but face challenges to scale. Government, MNC CSR, and other institutional distribution programs play a significant role.

Price

⁴⁰ RHSC, *RH LEAP (Landscape Assessment and Projection of RH Supply Needs)* (2021, Forthcoming). Estimates from 2019. Kenya estimates were informed by PMA2020 survey data. For these use estimates, menstruators who report using a commercial MH product may be using multiple commercial products types and/or mixing use of commercial products with non-commercial absorbents (e.g., cloth, rags, or homemade reusable pads).

⁴¹ Data are based on a qualitative information captured during the country deep-dives.

Affordability remains a large barrier. Kenya has supported multiple rounds of tax reform, but with little documented impact on retail price. Production costs in-country are high, and this has resulted in a preference for white label importing. Retailer margins on products are 16-20%, and wholesaler margins are between 5-10%.

Promotion

As in other countries, inadequate education and awareness remains a barrier, but is improving with MH education now included in school curricula under the new menstrual hygiene management policy. MNCs are engaged in mass and social media efforts, with some retail level promotion by various actors. Social enterprises combine product promotion with education.

Rapid Assessment of Kenya's MH Market Maturity

Elements	Assessment for Kenya	Explanation
Market Fundamentals		
Coalition/Coordination: An active MH working group (coalition) exists and meets regularly. A range of commercial actors (product suppliers, distributors) are actively engaged in a coalition sub-group or other coordinating body.	Expanding	There is an active MH coalition, but with only minimal involvement of commercial actors. No other known commercial coordinating body.
Government Leadership: There is at least one clear MH focal point within the national government and coordination across ministries and departments. The MH working group has active participation from national government representatives.	Advanced	There is at least one MHM focal point within the government (MOH). This person is engaged in the MH coalition.
Standards/Registration: Product standards exist and are available for disposable pads, reusables, and cups. There is awareness and fair enforcement of product standards. Registration of new products has a clear process and does not limit product breadth.	Emergent	Disposable pad standards exist, reusable pad standards are near final. No standards for cups. Challenges cited in registering reusable pads and cups for commercial sales in retail shops.
Policy: A current national MH policy or plan exists and is actively used for program planning. The current national MH policy/plan includes a section on increasing product access, affordability, quality, etc.	Expanding	Kenya has an ambitious MHM policy, 2019-2030, which sets out roles for govt agencies, NGOs, private sector, etc. One of the five objectives focuses on access to products, services, and facilities. Unclear as of yet to what extent implementation of the policy is being supported, or if/how it is being used in program planning.
Tax environment: A review of tax policies relevant to MH product has been	Expanding	Kenya has gone through several rounds of tax reforms to facilitate MH product access

conducted and/or progress towards tax reform has begun. National tax policies are supportive of MH product access.		and affordability. Results have yet to be documented in price reductions.
Market Environment		
Social enterprises: Presence of social enterprises working on MH product access from a variety of angles/product types. Locally-based social enterprises have sustained business for 5+ years and scaled beyond national boundaries.	Expanding	Several social enterprises working on distribution, disposable pads, and reusable pads. With the exception of ZanaAfrica, most social enterprises are less than 5 years old. No known Kenyan-based social enterprises working regionally.
Mid-tier and local manufacturers: Presence of mid-tier companies doing local manufacturing, and the market share manufactured locally.	Expanding	Two local manufacturers with moderate market share.
MNCs: Presence of MNC brands officially distributed/sold in country, along with local company representation to support distribution, marketing, etc.	Advanced	Always, Kotex, Lil-lets have official distribution / sales in Kenya; P&G has a local brand manager, KC has local representation.
Market Breadth and Depth		
Product and price: A range of price points and product variants including product types, brands, package sizes, and price points commercially available.	Expanding	Full range of product types, but limited availability of reusables. At least 25 brands of disposable pads identified. Range of prices support a diversity of options.
Place: The extent to which MH products are accessible including whether product availability extends to remote, rural areas.	Expanding	Mostly reliant on FMCG, pharma, but growing use of e-commerce, vending machines. Widespread free distribution in schools. Availability suspected to drop in rural areas.
Promotion: Brand owners and other actors along the supply chain actively promote their products.	Expanding	MHM education in schools is strong. Active commercial brand promotion in mass and social media, some retail promotion.
Macro Factors		
GDP per capita	Expanding	\$1,816.5
% of menstruators who have used commercial MH product	Advanced	86%
Overall		
Summary score	Expanding	1 Emergent, 9 Expanding, 3 Advanced
Possible Scores		
<ul style="list-style-type: none"> • Not yet present or not enough information • Emergent • Expanding • Advanced 		

Tanzania

Approximately 68% of Tanzania's 13 million menstruators are estimated to have used a commercial MH product. Most menstruators, 65%, use disposable pads, with reusable product use, including reusable pads and menstrual cups, estimated at 3% of menstruators, and the remaining 32% using other products. The current estimated value of the MH market in Tanzania is \$171million, and it is estimated to grow to \$201 million by 2025, assuming access to MH products remains at status quo. The market consists of approximately 1.2 billion disposable pads, 2 million reusable pads, and 6,000 menstrual cups sold per year.⁴²

Our assessment identified at least 19 brands of disposable pads, three tampon brands, and two menstrual cup brands available on the market. Disposable pads ranged in price from \$0.69 to \$1.54 (pack sizes of all ranges); and reusable cups from \$10.78- \$17.25.⁴³

Product

The largest market share in Tanzania is held by a locally-owned disposable pad brand importing from China, Freestyle. Using a single distribution company that focuses on low-cost FMCG, Freestyle is widely available in both urban and rural areas across the country at consistent prices. There is only one manufacturer of disposable pads, Kays Hygiene Limited. There are several mid-tier importers, plus the MNC brands, Always & Kotex. Menstrual cups have recently been introduced, with one locally owned company selling cups imported from China (Hedhi Cup by Anuflo Industries, Ltd.). Lunette is also working to begin sales and distribution of their cups in Tanzania. There are limited sales of reusable pads, mostly from cottage industries. Quality is valued among consumers, but there is a lack of clarity on product standards and enforcement. The government is encouraging local manufacturing through tax changes, but other policies and high production costs limit the impact of such measures.

Place

Distribution is occurring almost entirely through traditional FMCG and pharmaceutical channels and outlets. E-commerce does not appear to be well established in Tanzania. Free and subsidized distribution programs play a smaller role than other countries due to limited government involvement and limited CSR programs.

Price

The market leader, Freestyle, is able to ensure consistent pricing across urban and rural areas. Others struggle to get out of urban areas, especially with affordable pricing. VAT on MH products was reduced, and then reverted a short time later when no immediate price reduction was seen. Tax changes to support in-country manufacturing were recently instituted. Similarly, a price cap

⁴² RHSC, *RH LEAP (Landscape Assessment and Projection of RH Supply Needs)* (2021, Forthcoming). Estimates from 2019. Kenya and Nigeria estimates were informed by their PMA2020 survey data and India estimates were informed by the most recent Demographic Health Survey. Tanzania data were based on regional and income group averages. For these use estimates, menstruators who report using a commercial MH product may be using multiple commercial products types and/or mixing use of commercial products with non-commercial absorbents (e.g., cloth, rags, or homemade reusable pads).

⁴³ Data are based on a qualitative information captured during the country deep-dives.

for MH products was explored, but was not determined to be feasible. Retailer margins are between 30-40% and wholesaler margins are between 9-16%.

Promotion

Many suppliers are not investing in promotion and marketing due to a lack of capital and stigma. The I4ID project provided retail-level marketing support to one brand owner, which contributed to steep sales gains during the period of project support. (See text box above on Kay's Hygiene Products.) Lack of awareness and need for intensive education had added to the challenges of introducing menstrual cups. There is very little MH product distribution and/or education for in schools or other settings.

Rapid Assessment of Tanzania's MH Market Maturity

Elements	Assessment for Tanzania	Explanation
Market Fundamentals		
Coalition/Coordination: An active MH working group (coalition) exists and meets regularly. A range of commercial actors (product suppliers, distributors) are actively engaged in a coalition sub-group or other coordinating body.	Expanding	There is an active MH coalition, but with only minimal involvement of commercial actors. No other known commercial coordinating body.
Government Leadership: There is at least one clear MH focal point within the national government and coordination across ministries and departments. The MH working group has active participation from national government representatives.	Expanding	Several ministries work on MH, with an MOH person coordinating and sitting on coalition. Little government leadership for MH education, distribution.
Standards/Registration: Product standards exist and are available for disposable pads, reusables, and cups. There is awareness and fair enforcement of product standards. Registration of new products has a clear process and does not limit product breadth.	Emergent	Disposable & reusable pad standards exist, but there is a lack of awareness and clarity on their use and enforcement. No standards for cups. Managed by Tanzania Bureau of Standards.
Policy: A current national MH policy or plan exists and is actively used for program planning. The current national MH policy/plan includes a section on increasing product access, affordability, quality, etc.	Not yet present	No national policy or plan exists.
Tax environment: A review of tax policies relevant to MH product has been conducted and/or progress towards tax reform has begun. National tax policies are supportive of MH product access.	Emergent	VAT was removed and then replaced. More recent changes encourage local manufacturing.

Market Environment		
Social enterprises: Presence of social enterprises working on MH product access from a variety of angles/product types. Locally-based social enterprises have sustained business for 5+ years and scaled beyond national boundaries.	Emergent	Several social enterprises working on reusables. Most are young and none known to have scaled beyond Tanzania.
Mid-tier and local manufacturers: Presence of mid-tier companies doing local manufacturing, and the market share manufactured locally.	Expanding	Several mid-tier companies based in Tanzania, including one local manufacturer. Market leader is foreign-owned/imported mid-tier.
MNCs: Presence of MNC brands officially distributed / sold in country, along with local company representation to support distribution, marketing, etc.	Emergent	Limited MNC presence, with most working through importers and distributors without local presence.
Market Breadth and Depth		
Product and price: A range of price points and product variants including product types, brands, package sizes, and price points commercially available.	Expanding	Full range of product types, but limited price range. Only one cup currently for sale.
Place: The extent to which MH products are accessible including whether product availability extends to remote, rural areas.	Emergent	Mostly reliant on FMCG, pharma. Market leader has good rural distribution, but less so for other brands and types. E-commerce not established. Some brand owners strengthening FMCG distribution.
Promotion: Brand owners and other actors along the supply chain actively promote their products.	Emergent	Many suppliers are not investing in promotion. Little to no education/distribution from MNCs, government.
Macro Factors		
GDP per capita	Expanding	\$1,112
% of menstruators who have used commercial MH product	Expanding	68%
Overall		
Summary score	Emergent	1 Not yet present; 6 Emergent; 6 Expanding
Possible Scores		
<ul style="list-style-type: none"> • Not yet present or not enough information • Emergent • Expanding • Advanced 		

Nigeria

Approximately 68% of Nigeria's 44 million menstruators are estimated to have used a commercial MH product. Most menstruators, 64%, use disposable pads, with reusable product use, including reusable pads and menstrual cups, estimated at 3% of menstruators, and the remaining 33% using other products. The current estimated value of the MH market in Nigeria is \$632 million, and this is estimated to grow to \$729 million by 2025, assuming access to MH products remains at status quo. The market consists of approximately 4.3 billion disposable pads, 6.9 million reusable pads, and ~20,000 menstrual cups sold per year.⁴⁴

Our assessment identified at least 13 brands of disposable pads, 3 reusable pad brands, and 1 tampon brand, and 3 menstrual cup brands available on the market. Disposable pads ranged in price from \$0.61 to \$4.24 (8-12 pack), tampons at ~\$1.82, and menstrual cups from \$36.47-\$42.55.⁴⁵

Product

Disposable pads dominate the market, with global brand Always having the largest market share. Local mid-tier manufacturers (e.g., LadyCare) and Chinese brands (e.g., Longrich, Norland) are growing market share. Some of these brands use additives and are comparatively expensive, but the purported health benefits are aggressively marketed to attract new users. Several brands of menstrual cups and reusable pads are available in the market, but brand owners cite challenges in the product registration process as a limiting factor to new product entry and growth. NGOs and social enterprises are increasingly supporting MH product distribution, especially in response to localized security challenges. In some cases, these distribution programs are partnering with local cottage industry manufacturers of reusable pads. A competitive environment (more so than other countries) predominates in Nigeria, which may be due to the lack of a strong MH coalition in the country.

Place

Outlets served primarily by traditional FMCG and pharmaceutical distribution channels, especially in rural and low-income areas, face stock-outs and limited brand availability. E-commerce is gaining traction in urban areas, with multiple competing enterprises pursuing this approach; however, they appear to be less established than in Kenya and India, particularly for MH products. Multi-level marketing (consumer-to-consumer) is a growing trend in Nigeria and seems to be more popular there than in other countries studied. Numerous, diverse free and subsidized distribution programs are scattered across the country.

⁴⁴ RHSC, *RH LEAP (Landscape Assessment and Projection of RH Supply Needs)* (2021, Forthcoming). Estimates from 2019. Nigeria estimates were informed by PMA2020 survey data. For these use estimates, menstruators who report using a commercial MH product may be using multiple commercial products types and/or mixing use of commercial products with non-commercial absorbents (e.g., cloth, rags, or homemade reusable pads).

⁴⁵ Data are based on a qualitative information captured during the country deep-dives.

Price

Inflation and exchange rates in Nigeria are affecting the market for imported goods broadly, including MH products. Import duties are also seen as a contributor to higher prices. In 2019, VAT on locally manufactured pads and tampons was removed, but there are very few locally manufactured brands, and this policy is thought not to have made an impact on consumer price. The registration process is cumbersome and had inhibited introduction of new products/brands into market. Affordability remains a large barrier.

Promotion

Awareness of MH products, especially reusables, continues to be a challenge. The impact of stigma and taboo on access and use of MH products varies by region. Social media has become a significant channel for brand promotion, with mass media and word-of-mouth promotion also important. The lack of a strong MH coalition has limited coordinated and nationwide awareness and promotion.

Rapid Assessment of Nigeria's MH Market Maturity

Elements	Assessment for Nigeria	Explanation
Market Fundamentals		
Coalition/Coordination: An active MH working group (coalition) exists and meets regularly. A range of commercial actors (product suppliers, distributors) are actively engaged in a coalition sub-group or other coordinating body.	Emergent	New MH coalition is not yet well-established, with limited involvement of local actors.
Government Leadership: There is at least one clear MH focal point within the national government and coordination across ministries and departments. The MH working group has active participation from national government representatives.	Emergent	Minimal engagement of government in MH work and coordination. A flyer on government responsibility for MH was released in 2017. Ministry of Women's Affairs is designated lead.
Standards/Registration: Product standards exist and are available for disposable pads, reusables, and cups. There is awareness and fair enforcement of product standards. Registration of new products has a clear process and does not limit product breadth.	Emergent	Only disposable pad standards. Challenges to product registration cited by several suppliers, particularly for reusable pads.
Policy: A current national MH policy or plan exists and is actively used for program planning. The current national MH policy/plan includes a section on increasing product access, affordability, quality, etc.	Not yet present	No national policy or plan exists.
Tax environment: A review of tax policies relevant to MH product has been conducted	Expanding	There was a successful tax reform campaign to make MH products

and/or progress towards tax reform has begun. National tax policies are supportive of MH product access.		VAT exempt in 2019, but not thought to have had an impact on price.
Market Environment		
Social enterprises: Presence of social enterprises working on MH product access from a variety of angles/product types. Locally-based social enterprises have sustained business for 5+ years and scaled beyond national boundaries.	Expanding	There are many social enterprises selling various MH products, but most are young and few have scaled beyond Nigeria.
Mid-tier and local manufacturers: Presence of mid-tier companies doing local manufacturing, and the market share manufactured locally.	Expanding	Several mid-tier suppliers, including some with local manufacturing.
MNCs: Presence of MNC brands officially distributed / sold in country, along with local company representation to support distribution, marketing, etc.	Expanding	Major MNCs distribute and sell in Nigeria, with local presence supporting distribution. Limited marketing efforts.
Market Breadth and Depth		
Product and price: A range of price points and product variants including product types, brands, package sizes, and price points commercially available.	Emergent	Full range of product types, but limited price range targets the growing middle class rather than poor. Reusables still struggling to enter market.
Place: The extent to which MH products are accessible including whether product availability extends to remote, rural areas.	Emergent	Access is much stronger in urban areas than rural areas. E-commerce and other innovations are growing, but size of country challenges wide distribution.
Promotion: Brand owners and other actors along the supply chain actively promote their products.	Emergent	Many suppliers are not investing in promotion. Little to no education/distribution from MNCs, government.
Macro Factors		
GDP per capita	Advanced	\$2,229
% of menstruators who have used commercial MH product	Expanding	68%
Overall		
Summary score	Emergent	1 Not yet present; 6 Emergent; 5 Expanding; 1 Advanced
Possible Scores		
<ul style="list-style-type: none"> • Not yet present or not enough information • Emergent • Expanding • Advanced 		

India

Approximately 58% of India's 368 million menstruators are estimated to have used a commercial MH product. Most menstruators, 55%, use disposable pads, with reusable product use, including reusable pads and menstrual cups, estimated at 3% of menstruators, and the remaining 42% of menstruators using other products. The current estimated value of the MH market in India is \$3.5 billion, and it is projected to grow to \$4.9 billion by 2025 if access to MH products remains at status quo. The market consists of approximately 32 billion disposable pads, 43 million reusable pads, and ~404,000 menstrual cups sold per year.⁴⁶

Our assessment identified at least 20 brands of disposable pads, 16 reusable pad/panty brands, 5 tampon brands, and 24 menstrual cup brands available on the market. Disposable pads ranged from \$0.38-\$3.56 (4-12 pack), tampons from \$1.62-\$8.22 (10-20 pack), and menstrual cups from \$2.74- \$21.92.⁴⁷

Product

MNCs that primarily focus on disposable pads dominate the market (e.g., P&G, J&J, and Unicharm brands), but local mid-tier brand owners focused on regional and urban/peri-urban markets are assuming an increasing market share. While there are many disposable pad manufacturers located in India, including some MNC production sites, a tax policy change to zero-rate Goods and Services Tax (GST) for importers has limited local manufacturers and suppliers of raw materials from claiming input tax credit, giving importers a ~12% advantage over local manufacturing. There are numerous reusable pad and menstrual cup brand owners operating in India, but these products still represent only a small market share. There is also some product innovation occurring, including the development of compostable products and/or experimentation with locally sourced raw materials. The presence of cottage industry manufacturing of disposable pads supported by pad machine manufacturers and NGOs also distinguishes the market in India. Across all products, quality is highly varied but with active efforts to make improvements through updated standards.

Place

Penetration of MH products has increased significantly with strong investments from MNCs and regional brands in sales and distribution. However, access in rural areas remains a challenge as MH products are limited to 30% of the penetration of food products. A recent innovation to improve last-mile access – retail entrepreneurs using agents (e.g., tailors, stalls, etc.) to expand community retail points – is gaining some traction. E-commerce is steadily growing. Vending machines have created a market in institutions like universities, health facilities, transit facilities, factories, etc. Government and MNC-funded school-based free distribution programs are widespread and are creating demand for products in rural areas.

⁴⁶ RHSC, *RH LEAP (Landscape Assessment and Projection of RH Supply Needs)* (2021, Forthcoming). Estimates from 2019. India estimates were informed by the most recent Demographic Health Survey. For these use estimates, menstruators who report using a commercial MH product may be using multiple commercial products types and/or mixing use of commercial products with non-commercial absorbents (e.g., cloth, rags, or homemade reusable pads).

⁴⁷ Data are based on a qualitative information captured during the country deep-dives.

Price

The market is highly price sensitive and competitive, and most users can afford disposable products (except the very bottom of the pyramid). Disposable products are available across price points with variations in product features and quality. Costs include transportation (6-10%) and distribution margins (35-40%). RRP's are generally followed by retailers. Reusable products have highly variable pricing due to lack of information on grades/quality. Local manufacturing costs are lower than in other countries studied.

Promotion

The majority of efforts around education/awareness are being pushed by MNCs via aspirational product marketing and government, but stigma and taboos remain. Education in schools has been successful at creating long-term users and brand loyalty. Reusable products lack the targeted marketing push that disposable products have, and promotional efforts are limited to environmental and health aspects.

Rapid Assessment of India's MH Market Maturity

Elements	Assessment for India	Explanation
Market Fundamentals		
Coalition/Coordination: An active MH working group (coalition) exists and meets regularly. A range of commercial actors (product suppliers, distributors) are actively engaged in a coalition sub-group or other coordinating body.	Advanced	MHA is strong and active coalition for gov't and NGOs. Industry association (FIHA) brings together commercial actors, but is not as effective.
Government Leadership: There is at least one clear MH focal point within the national government and coordination across ministries and departments. The MH working group has active participation from national government representatives.	Advanced	Many state and national govts are engaged in MH work. National MHM policy, in place since 2015, sets out roles.
Standards/Registration: Product standards exist and are available for disposable pads, reusables, and cups. There is awareness and fair enforcement of product standards. Registration of new products has a clear process and does not limit product breadth.	Expanding	Standards for disposable and reusable pads in place, but deficits in awareness and use. Few limitations to product registration.
Policy: A current national MH policy or plan exists and is actively used for program planning. The current national MH policy/plan includes a section on increasing product access, affordability, quality, etc.	Expanding	National MHM guidelines were launched in 2015, with clear roles for various ministries, but operationalization of the guidelines remains weak.
Tax environment: A review of tax policies relevant to MH product has been conducted and/or progress towards tax reform has begun. National tax policies are supportive of MH product access.	Expanding	Tax reform done in 2017, but result favors importers over local manufacturers. No active campaign for future reform.

Market Environment		
Social enterprises: Presence of social enterprises working on MH product access from a variety of angles/product types. Locally-based social enterprises have sustained business for 5+ years and scaled beyond national boundaries.	Advanced	Numerous social enterprises working on all aspects of MH; many have 10-year history, and are active regionally/globally.
Mid-tier and local manufacturers: Presence of mid-tier companies doing local manufacturing, and the market share manufactured locally.	Advanced	Wide range of mid-tier companies importing and manufacturing. White label and MNC manufacturing also in India. Recent tax reforms favor importers.
MNCs: Presence of MNC brands officially distributed / sold in country, along with local company representation to support distribution, marketing, etc.	Advanced	All major MNC players active in India. Some MNCs manufacture in-country. MNCs also play significant role in marketing, education, free distribution.
Market Breadth and Depth		
Product and price: A range of price points and product variants including product types, brands, package sizes, and price points commercially available.	Advanced	Wide range of products and prices.
Place: The extent to which MH products are accessible including whether product availability extends to remote, rural areas.	Expanding	Market penetration is strong and growing with commercial actors focused on reaching rural areas, but still lags behind other commercial products, especially for reusables.
Promotion: Brand owners and other actors along the supply chain actively promote their products.	Expanding	Strong education efforts to reach youth from govts, NGOs, MNCs. MNCs advertise in mass media. However, stigma and taboo continue to harm market.
Macro Factors		
GDP per capita	Advanced	\$2,099
% of menstruators who have used commercial MH product	Expanding	58%
Overall		
Summary score	Advanced	6 Expanding, 7 Advanced
Possible Scores		
<ul style="list-style-type: none"> • Not yet present or not enough information • Emergent • Expanding • Advanced 		

Annex 6: MH Brands in Deep-Dive Countries

Kenya	Tanzania	Nigeria	India
❖ Disposable Pads All Tyme Always BeGirl Clincleer Confidence Fem Secret Flora Grip Power Pads Human Cherish Kotex Lily Longrich Marvel Girl Molped My Girl Nia Pad Mad Rosy Girl Sanfe Shuya Soft Care Stay Free Sunny Girl Velvet Vibrant ❖ Reusable Pads BeGirl Padmad ❖ Tampons Cottons Jasmin Kotex Lil-lets Natura Femina O.B. Tampax ❖ Menstrual Cups BeGirl Fit cup	❖ Disposable Pads Freestyle Always Human Cherish Kotex Maks Care Belle Sisters Soft Care StayFree Princess Swan Cathy Angel MyGirl Binti Kipepeo Lavy Pads Moddess Hers Glory ❖ Tampons Tampax Jasmin Lil-lets ❖ Menstrual Cups Hedhi Cup Lunette Cup	❖ Disposable Pads Longrich Superbkleen Always Angel Secret Virony Sofy Lady Care NDK Norland Anion Molped Comfit Dry Love Dr. Brown Kotex ❖ Reusable Pads Alora SafePads Pad-Up ❖ Tampons Tampax ❖ Menstrual Cups Promise Cup Sheba Moon Cup Uterus Healing Cup	❖ Disposable Pads Whisper Stayfree Carefree Sofy Proease She Comfort Niine Caretex Anandi* Sakhi* Saathi* Sirona* Pee Safe/Raho Safe Nua The Woman's Company Aisha/Active Ultra (Sara) Pad Woman Mesa Rio pads Myna pads *Biodegradable ❖ Period panties Kotex Evereve Saafkins Soch Green ❖ Reusable Pads Boondh Safe Pads Unipads Ecofemme Project Baala Uger pads Fabpads Stonesoup Rebelle Plush Peesafe Re-pad

<p>Crimson Care Grace Cup Ruby Cup Sanfe</p>			<p>❖ Tampons Sofy OB pro comfort The Woman's Company Pee Safe/Raho Safe Sirona</p> <p>❖ Menstrual Cups Pee Safe/Raho Safe The Woman's Company Carmesi Sirona Soch Boondh Stonesoup Rustic Art Safe Cup Evereve Everteen i-activ She Cup Namyaa WOW Freedom Varni Sanfe My EverCup Plush KUQ Lemme Be Ze Nari Yari Gaaia SafeCup USA</p>
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*Note: This is an illustrative non-exhaustive list from our qualitative country deep-dives.

Annex 7: Market Function Definitions

Core supply and demand functions	Product	The range and characteristics of products and services offered in the MH market: MH products are described in this report as disposable pads, tampons, reusable pads, and menstrual cups.
	Price/Affordability	Includes margins and markups along the supply chain from manufacturer that impact pricing to consumer, aspects of how sellers differentiate prices within the market, payment structures and timing (e.g. how long it take actors to get paid), a summary of any subsidy targeting product affordability applied in the market (either direct or indirect).
	Place/Access	The locations (including new geographies) and channels where players sell their products and where services are offered. Place factors in user preferences for certain outlets, channels, and includes challenges serving urban, rural or peri-urban environments. Place factors in elements important to consumers such as need for privacy or confidentiality, and degree to which outlets and clinics align with preferences and need.
	Promotion/Demand	Communications activities (messages, channels, tools, exposure levels and behavior change) taking place in the market to create demand. May be both consumer demand or business-to-business sales (i.e., distributor to retailer).
SUPPORT FUNCTIONS	Information	The extent to which quality information about a market such as size of market, the competitive and coordinating environment, products, services, the user environment or other market aspect is widely known. Includes how well market players interact within the sector, presence of organizations providing coordination across the players in the supply chain, such as an industry/provider association, or could represent a body that is responsible for facilitating the development of a market such as an NGO or technical working group.
	Coordination	Interaction between market players up and down the value chain; are there organizations providing coordination across the players in the supply chain, such as an association, or a body that is responsible for facilitating the development of a market such as an NGO or technical working group.
	Quality	National requirements or mechanisms that apply to market players to ensure a product/service meets agreed standards; the agencies/organizations that create/monitor these requirements.
	Guidance	Guidance supports policy; the recommendations given by expert bodies on market functions. Issues and guidance related to the manufacture, distribution and service delivery of a product or service.

	Labor Capacity	Current skills and resources of market players and health workers required to supply and promote their product or service. The degree of investment that will be required to upgrade these skills and resources.
	Financing	External financing mechanisms that enable smooth operation and growth of the business or that facilitate demand for products/services (e.g. subsidies, direct demand creation by third parties, etc.). Sources may include grants, microfinance, capital markets, loans, insurance, etc.
RULES	Taxes & Tariffs	Includes MOH and global directives to support country access to products and services. Support for key policies that affect manufacture, distribution, importation, and service provision of products. Also includes identification of the policies creating barriers or challenges for entry into the market.
	Informal Rules & Norms	The social, cultural, and industry norms that influence the practical access to a product or service; these are typically unwritten and not always immediately apparent.

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Disclaimer: This report is not prescriptive in nature but provides a framework to guide programming and investment decisions, and lobbying, advocacy and research in relation to supply-side and access constraints to MH products. All statements and conclusions, unless specifically attributed to another source, are those of the authors and do not necessarily reflect those of any individual, organization, or institution consulted.