



Awareness

Normalising **MENSTRUATION**

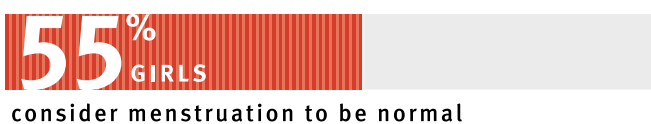
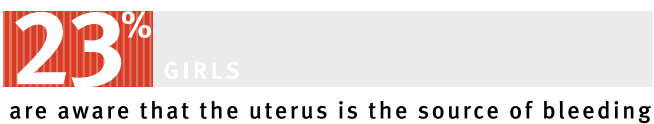
Calls to Action

- **Make MHM programmes comprehensive**, providing complete information on menstruation, menstrual hygiene, product basket available, disposal and treatment, and equip girls and women with the self-confidence and self-efficacy needed to address harmful socio-cultural norms.
- **Build capacity of functionaries** at the district level and below with streamlined, comprehensive MHM messaging.
- **Include relevant influencers** - boys and men, frontline health workers, educators, health care providers, religious and political leaders in MHM conversations and programming.
- **Increase positive reporting** on MHM in media, addressing taboos.

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- **THE BIOLOGICAL PROCESS OF MENSTRUATION IN INDIA CONTINUES TO BE SHROUDED IN A CULTURE OF SILENCE AND SHAME. INEQUITABLE GENDER NORMS MANIFEST IN THE SOCIAL, RELIGIOUS AND FOOD INTAKE RESTRICTIONS IMPOSED ON MENSTRUATING GIRLS AND WOMEN, AND THE PERVASIVE BELIEF THAT MENSTRUAL BLOOD IS IMPURE AND THAT MENSTRUATING WOMEN ARE UNCLEAN.**

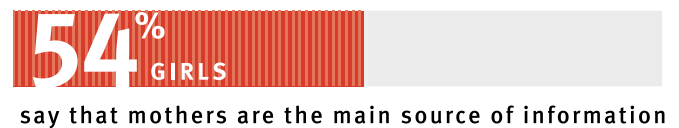
Traditional practices around menstruation that may have once served to provide comfort to women during this time, have disintegrated and are now tools that entrench inequitable gender norms and power relationships. These changes have created a fundamentally negative and unhealthy narrative of menstruation.

Research on MHM in India underscores low levels of awareness, and several myths and misconceptions¹



Several socio-cultural restrictions on interactions, food consumption, religious worship etc.

Additionally, girls have few sources of correct and comprehensive information on menstruation²

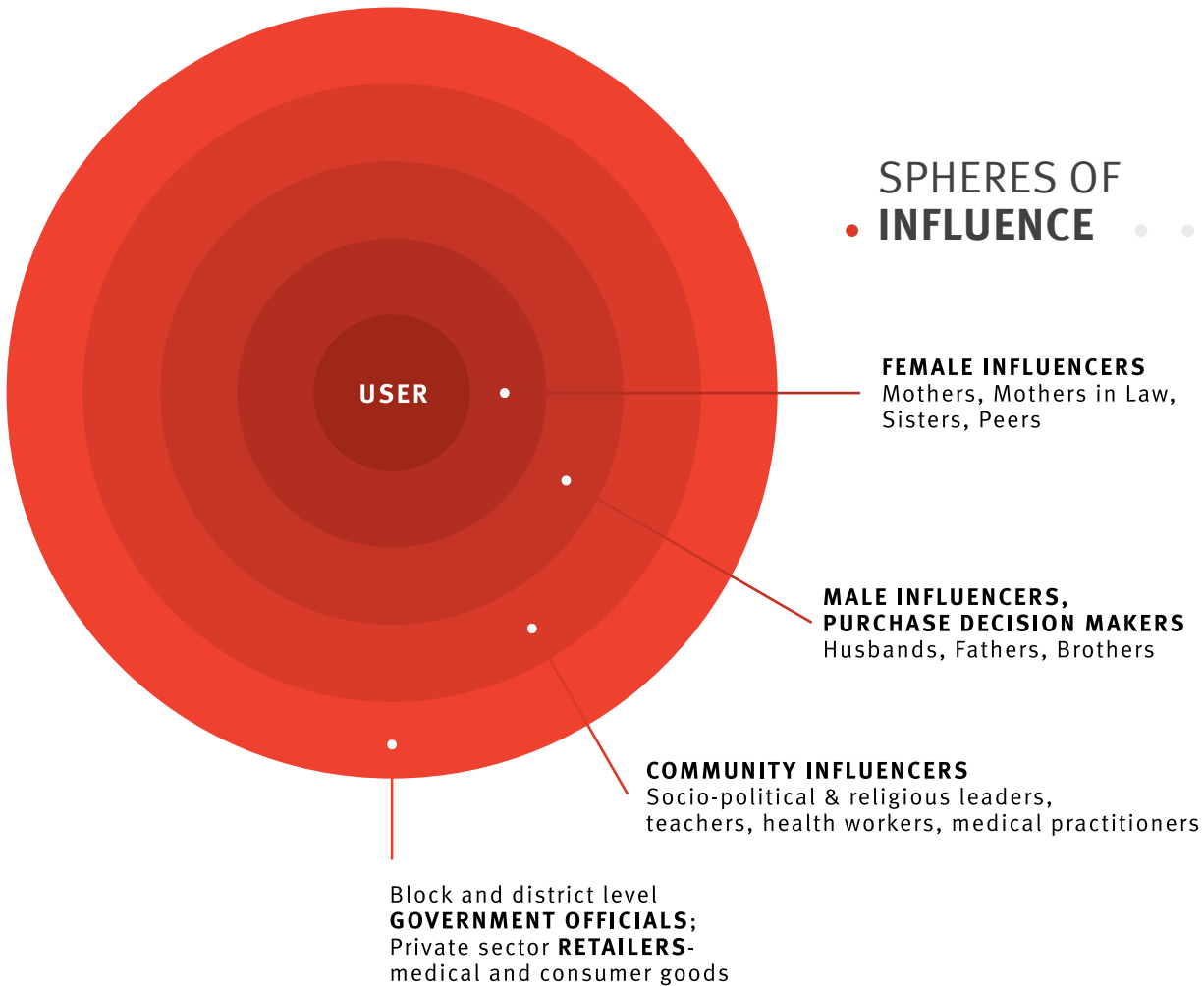


Teachers and health workers are not common sources of information, mothers are

Various stakeholders including National and State Governments, private sector, civil society organisations and non-Governmental organisations have been working towards normalising menstruation. While making great strides in their individual spheres, these efforts have been disaggregated. It is essential to streamline efforts and messaging related to normalising menstruation and reach out to influencers at all levels (from families to policy makers) to shift the conversations on menstruation from impurity and shame to 'normal' and healthy. Normalising conversations on menstruation in all these spheres will help create a platform to provide comprehensive information, safe products, infrastructure and health services to women to help manage menstruation safely.

¹ van Eijk AM, Sivakami M, Thakkar MB, et al. Menstrual hygiene management among adolescent girls in India: a systematic review and metaanalysis. *BMJ Open* 2016;6: e010290. doi:10.1136/ bmjopen-2015-010290

² Dasra (2014). Spot On! Improving Menstrual Health and Hygiene in India



In order to be effective, it is important that messaging to these various **influencers** on MHM from various organisations working on MHM, sexual and reproductive health, WASH, gender and other entities are correct and consistent.

MHM conversations have focused on addressing myths and taboos and providing information on product access and use.

However, normalising menstruation requires addressing gender inequalities and provision of correct information across the value chain of menstruation to ensure that

Girls and women overcome stigma, shame and taboos

Girls and women are able to manage their menstruation safely, and

Influencers have a comprehensive understanding of their experience and barriers

WHAT IS NORMAL?

What is menstruation – the physical process and its implications

Socio-cultural norms and perceptions including myths and taboos

Linkages of gender and sexual and reproductive health with menstruation

MENSTRUAL HYGIENE MANAGEMENT

● VALUE CHAIN

Awareness generation on menstrual hygiene management has typically focused on use of sanitary pads. Information to users and influencers should speak to each component of the value chain from addressing social norms and taboos, choice of and access to products, hygienic use, access to facilities and waste management.

AWARENESS

- Socio-cultural norms and perceptions about menstruation



ACCESS

- Product features

Cost to consumer (including price)



Types of products by environmental impact



Points of availability (community based, Government agents, retailers, schools etc.)

Sources of information



USE

- Safe and hygienic use

Taboos related to menstruation that affect menstrual hygiene



Health seeking behaviours



Access to WASH facilities

Design of WASH facilities



WASTE MANAGEMENT

- Mechanisms for safe disposal

Considerations for on-site incineration

Considerations for adding to solid waste stream

Implications of throwing in fields, water bodies, sanitation systems

Considerations for deep burial, composting

Design of WASH facilities





Access and Use

MENSTRUAL HYGIENE PRODUCTS IN INDIA

The Evolving Landscape

Calls to Action

- Information on availability, user preferences, environmental impact and cost should inform
 - Product procurement for large scale Menstrual hygiene management programs
 - Product standards for the complete range of Menstrual Hygiene products
 - A comprehensive tax structure for raw materials and finished goods across the range of Menstrual Hygiene products
- Clarity on classification of menstrual hygiene products as consumer or medical goods to ensure communication of comprehensive information to consumer on product use and side effects
- Universal availability of menstrual hygiene products and appropriate water, sanitation, hygiene and disposal options in Government institutional facilities, public places (Government and private run) and schools
- Catalyse research & development for environmentally sound products by market leaders and facilitate product adoption at scale through dialogue between market leaders and innovators

more times their weight in fluid.(Gupta, 2014)

Given this concern, various social enterprises and public health organizations have introduced menstrual hygiene product innovations that hope to tackle the environmental impact issue. These players have captured a miniscule share of the market within geographical clusters. Such innovations have minimal adverse impact on the environment in the long term and have potential to reach underserved communities. Unfortunately,

currently their use is undermined by limited awareness and availability. This is due to cost of products being high owing to small scale and limited product awareness as they have not yet been introduced to a majority of women. The full life cycle costs of the majority of commercially available products has not been factored into decision-making. The collective challenge is to continue the work on increasing access to safe MH products while catalyzing the industry in a direction that offers more sustainable products at scale.

MENSTRUAL HYGIENE PRODUCT LANDSCAPE

Given the importance of considering environmental impact as a key factor in the current scenario, the overall product landscape has been segregated into three broad categories:

Menstrual hygiene products available in India defined by environmental impact:

Reusables

Products that can be **used multiple times**.

Life span of **1-10 years** resulting in minimal disposal impact.

Hygienic use **requires care and maintenance**.

One time cost maybe high but life cycle cost is usually lower than disposables.



Cloth pads

Hybrid pads (with non cloth barrier)



Menstrual Cups

Compostable Disposable

Disposable products with **high degree of compostable content**.

One time use and materials conducive to composting; **limited impact on disposal**.

Layers sealing absorbent layer should have high degree of compostability.

Limited players in India with only one product variant each.

Currently **higher cost** than non-compostable.



Sanitary pads - banana fibre or wood pulp



Tampons

Non Compostable Disposable

Disposable products with **minimal compostability**.

One time use with compostable absorbent layer typically sealed within non-compostable layers.

Can take **250 years** to fully decompose.

Largest market share and reach in India with multiple players (MNCs, social enterprises, SHG units, Government network).



Cellulose based sanitary pads with plastic barriers or with plastic barriers and SAP

Cellulose based panty liners

MENSTRUAL HYGIENE PRO

Product Attributes	Reusable Products			Com
	Cloth Pads w/ without insert	Hybrid pads w/ non cloth barrier	Menstrual cups	Compostabl sanitary pad
Price Range (Rs.)	Rs. 85-400/pad (Average Rs. 250)		Rs. 400-3,000/cup (Average Rs. 1100)	Rs. 8/pad
Per cycle cost to consumer	Rs. 19 (assuming use for one year)		Rs. 85 (assuming use for one year)	Rs. 96
ENVIRONMENTAL I				
Reusable ● Disposable ●	●	●	●	●
Compostable ●	●	◐	○	●
USER PREFEREN				
Low cost per purchase				
Basic needs	●	●	●	●
No maintenance				●
Intensive physical activity				
Requires learnt behaviours			●	
No chemicals/ plastics	●	●	●	
Low life cycle cost	●	●	●	
Policy				
Awareness	Low income clusters and high income			Low
Availability	Low income clusters and online			Limited, two manufactu
Manufacturer	Ecofemme, Goonj, Gramalaya, Shomota, Soch, Uger, Saafkins		She Cup, Silky Cup, Moon Cup, Luna Cup, VCup, ALX, Rustic art, stonessoup wings	Aakar (Anandi p, Saathi Pads, Sakhi (Vatsal, Wager Hygie

DUCTS IN INDIA

Compostable Products		Non-compostable Products		
Products	Tampon with cardboard applicator	Cellulose based Sanitary pads w/plastic barriers	Cellulose based ultra thin pads w/ plastic barriers	Cellulose based panty liners
	Rs. 8/tampon and above	Rs.2-6.5/pad (Average Rs. 4)	Rs. 7-12/pad (Average Rs. 9)	Rs. 4.5/liner and above
	Rs. 96 and above	Rs. 48	Rs. 108	<i>Not for use for regular/heavy flow</i>

IMPACT

	●	●	●	●
	●	◐	◐ Additional SAP	◐

CHALLENGES

		●		
	●	●	●	●
	●	●	●	●
	●		●	●
	●		●	●

- SWM guidelines require appropriate disposal considerations
- Regular sanitary pads procured for Govt. distribution
- BIS standards for materials, size

	Low	Very high pan India	Very high in urban	Only urban high income
Access points	Medical stores in few urban high income clusters, online	Pan India Rural low income limited till medical shops at district/block, Schools, AWW centers	Pan India urban and peri-urban, online	Medical stores in urban high income clusters, online
Brands	Unicharm (Sofy), ob, Tampax, other imported brands	P&G (Whisper), J&J (Stayfree, Carefree), KCC (Kotex), Unicharm (Sofy), SHG based units like Vatsalya foundation, Sakhi retail etc.	P&G (Whisper), J&J (Stayfree), Saral Designs (Aisha), Wager Hygiene	J&J (Carefree), Unicharm (Sofy), other imported brands



Disposal and Treatment

MANAGEMENT OF MENSTRUAL WASTE

Calls to Action

- Management of menstrual waste to include the entire value chain including awareness, access, use, and waste management across urban and rural settings, and communities and institutions.
- Menstrual hygiene management programs to incorporate effects of disposal and treatment for the complete range of menstrual hygiene products (reusable, compostable and non-compostable disposable products) on users and on the environment.
- Clarity and agreement needed on classification of menstrual waste as solid waste or bio-medical waste across government departments and other stakeholders.
- Uniform standards and guidelines to be drafted and implemented for currently available menstrual waste management technologies, especially incinerators, composting pits, and waste to resource technologies
- Catalyse support for research and development of environmentally sound waste management

DISPOSAL SYSTEMS

- what exists and at what scale?

TABLE 1: MENSTRUAL WASTE DISPOSAL PRACTICES AMONG ADOLESCENT GIRLS IN INDIA⁴

Disposal of menstrual absorbent	Total pooled proportion*	Rural pooled proportion*	Urban pooled proportion*	Slum pooled proportion*	Concerns with disposal method
Throw with routine waste/dustbin	45	28	70	51	Menstrual waste enters the solid waste stream and is subject to the same treatment as other solid waste – placed in landfills to disintegrate over hundreds of years
Thrown away in the open (open spaces, rivers, lakes, wells, roadside etc.)	23	28	15	30	Menstrual waste can contaminate water sources, clog drains
Burning (open)	17	15	23	-	Burning of commercially available pads at low temperatures can create odours and expose nearby population
Burying	25	33	12	-	Burial is not done effectively, and without appropriate composting, waste will take hundreds of years to degrade
In toilets (flushing down the toilet, throwing in pit latrine)	9	10	7	-	Used pads mixed with faecal sludge, complicates disposal of that sludge (in the case of septic tanks) or interferes with the production of usable manure (in the case of leach pits)

Source: van Eijk et al (2016). Menstrual Hygiene management among adolescent girls in India: a systematic review and meta-analysis

*Pooled proportion is a percentage that has been derived from data in studies included in the above systematic review.

to manage menstrual waste appropriately. However, challenges exist in terms of cost and variations in incinerator technologies and their effectiveness in emission reductions, scale of operations, product use and environmental impact (refer Table 2).

What is clear is that the management of menstrual waste is lagging far behind the fast growing

disposable product market. If sanitary pads are to be a safe, hygienic option for girls and women, safe management of menstrual waste must be part of programmatic and policy dialogues. The voices of girls and women, as well as of waste collectors need to be incorporated to ensure that appropriate solutions are implemented.

⁴ van Eijk AM, Sivakami M, Thakkar MB, et al. Menstrual hygiene management among adolescent girls in India: a systematic review and metaanalysis. *BMJ Open* 2016;6: e010290. doi:10.1136/ bmjopen-2015-010290

TABLE 2: OPTIONS FOR MANAGE

	Waste management option	Advantages	
	Clay pots (matka)	<ul style="list-style-type: none"> • Low-cost • Matkas easily available in neighbourhood markets • Easy to use, particularly in rural households • Use locally available fuel (e.g., paper, kerosene, wood) 	<ul style="list-style-type: none"> • •
	Low-cost, locally made incinerators <ul style="list-style-type: none"> • Ashudhshinashak incinerator • Manually operated, fire based incinerators (MHM Guidelines, Technical Guide 2) 	<ul style="list-style-type: none"> • Low-cost • Easy to install in institutional settings: schools, community toilet complexes • Easy to use and maintain • Use locally available fuel (e.g., paper) 	<ul style="list-style-type: none"> • • • •
	Electric incinerators <ul style="list-style-type: none"> • Lakshmi Associates • E.R Ventures • Hindustan LifeCell • Wager Hygiene 	<ul style="list-style-type: none"> • The more expensive incinerators have emission control features (e.g., filters) • Runs on electricity, no need for other fuels • Installed in institutional settings: schools • Some models have quality certifications 	<ul style="list-style-type: none"> • • • • • •
	High-temperature incinerators for bio-medical waste <ul style="list-style-type: none"> • Bio-medical waste treatment facilities 	<ul style="list-style-type: none"> • Waste burned in large scale incinerators designed to deal with bio-medical waste • Waste burned together at a central incinerator facility typically located away from populated areas • Can incinerate all types of pads (those with high cellulose content, high moisture content, and those with SAP) 	<ul style="list-style-type: none"> • •
	Incinerators with waste to energy technology <ul style="list-style-type: none"> • RTI International • Shubhankar Gupta and colleagues in West Bengal 	<ul style="list-style-type: none"> • Waste is incinerated to produce energy/electricity (i.e., productive use of waste) • Combustion happens in highly controlled environments carefully regulating temperature and pressure, potentially controlling for emissions even at low temperatures • Innovations in waste to energy incinerators for community and institutional use are underway. • Can incinerate all types of pads (those with high cellulose content and those with SAP) 	<ul style="list-style-type: none"> • • •
	Segregation and identification of menstrual waste <ul style="list-style-type: none"> • Red Dot Campaign 	<ul style="list-style-type: none"> • Used pads are wrapped individually and segregated at source (by the waste generator) to allow for safe collection by waste collectors. Campaigns such as Red Dot Campaign (Pune) call for the identification of menstrual waste with a red dot to alert waste pickers of the nature of waste. • Secondary segregation at waste collection centres further separate menstrual waste for final disposal or treatment (i.e., landfill or incineration at a central facility) • Option to deal with all types of pads (those with high cellulose content and those with SAP) 	<ul style="list-style-type: none"> • • •
	Composting pits for biodegradable menstrual products	Composting pits can be made in communities (both urban and rural), and schools, encouraging for community based and community led composting	Co na
	Technologies that make productive use of waste/waste to resource technologies <ul style="list-style-type: none"> • Bio-digester technology for (compostable) menstrual waste • Recycling of menstrual waste • Vermiculture 	Can potentially be a sustainable solution for compostable menstrual waste	<ul style="list-style-type: none"> • •

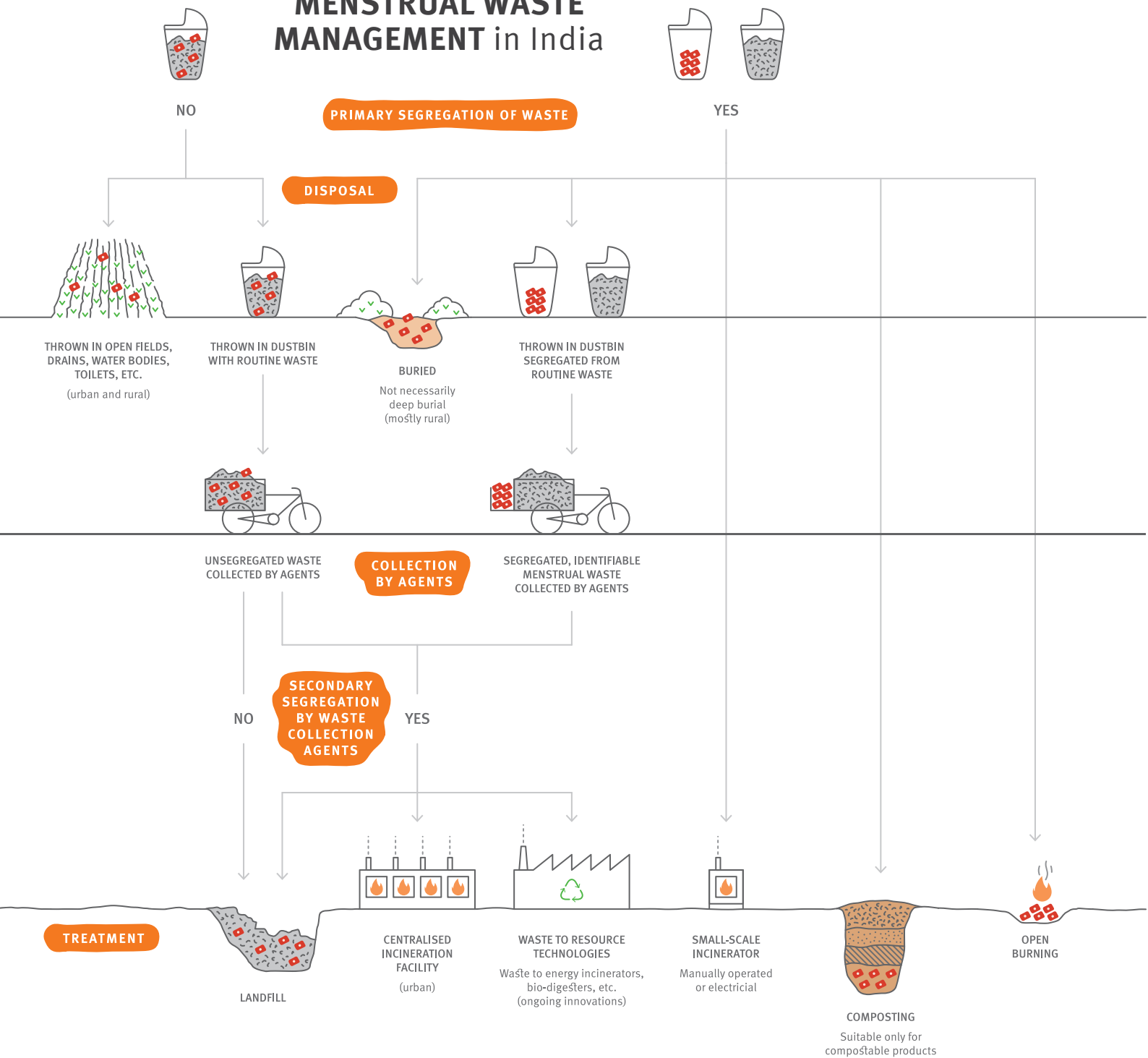
MENT OF MENSTRUAL WASTE

Disadvantages	Critical considerations for use
<p>No measures to control toxic emissions produced when burning plastics and chlorinated products used in bleaching cellulose. Toxic emissions potentially harmful to human health, especially when incinerator is stalled in populated areas or in households, schools</p> <p>Burns at low temperatures not exceeding 300 degrees Celsius and may not be efficient burners (residues may include ash, crystals, and even charred plastic). Depending on moisture content, may take considerable time to burn. More suitable for unbleached pads and those with high cellulose content, not those with SAP.</p> <p>Ash may not be safe to use for gardening purposes</p> <p>High variability in design- do not adhere to CPCB* standards for emissions</p> <p>Best suited for pads with high cellulose content, not those that have SAP**</p>	<ul style="list-style-type: none"> • Type and composition of product disposed of • Setting for use and placement of incinerator in setting • Volume of product to be incinerated at one go • Minimum and maximum burning temperatures • Emission control measures, adherence to CBCP standards • Cost • Operations and maintenance
<p>Dependent on electricity supply</p> <p>Costly</p> <p>Unclear whether they can efficiently burn pads with high moisture content and SAP</p> <p>Variation in the extent to which these incinerators adhere to CPCB* standards</p> <p>Require trained operator and routine operations and maintenance</p> <p>No standard quality certification</p>	
<p>Requires collection, storage, transportation of segregated menstrual waste to the central bio-medical waste treatment facility for incineration. Limited facilities exist in India at present</p> <p>Would necessitate classification of menstrual waste as bio-medical waste requiring treatment by all stakeholders</p>	
<p>Few waste to energy plants exist in the country, and those that do operate at a large scale at select locations</p> <p>Costly</p> <p>Waste to energy innovations applicable to community and institutional settings are still under development and will take time to pilot, test for efficiency and safety, and be available in the market</p>	
<p>Calls for waste generators to be committed to segregating waste, and for producers of disposable sanitary pads to provide covers for easy wrapping and disposal.</p> <p>Less focus on final disposal or effective treatment of segregated menstrual waste – once collected, majority of this waste still goes to a landfill and will take years to disintegrate.</p> <p>Concentrated in select metro cities, with little or no penetration in a majority of cities and rural areas.</p>	<ul style="list-style-type: none"> • Effective source segregation of menstrual products • Collection and transportation of segregated waste to central facility • Secondary segregation • Safe and effective treatment of segregated waste
<p>Composting a feasible option only for compostable sanitary pads (e.g., made of natural fibres), not pads made of bleached cellulose, SAP, and plastic covering.</p>	<ul style="list-style-type: none"> • Type and composition of product disposed of • Composting pits constructed according to specifications to facilitate composting
<p>Not much is known about these innovative methods, requires research and development</p> <p>Likely dependent on the use of compostable pads</p>	<ul style="list-style-type: none"> • Type and composition of product disposed of

**SAP: super absorbent polymers

CPCB: Central; Pollution Control Board

MENSTRUAL WASTE MANAGEMENT in India



● POLICY CONSIDERATION

- Classification of menstrual waste as solid waste, bio-medical waste has implications for how it can be disposed of, transported, contained and finally treated
- Prioritise waste management objective from amongst volume reduction, sterilisation, and changing the physical nature of waste
- Appropriate and safe disposal and treatment value chain needed for urban and rural settings, communities and institutions
- Menstrual waste disposal to consider use of non-biodegradable sanitary pads (increasingly available and preferred for use) as well as bio-degradable, compostable products
- Waste management recommendations to consider effects of disposal and treatment on user as well as the environment
- Test/pilot innovations that are potentially environmentally sound (e.g., waste to energy incinerators, treatment systems that can produce productive waste)

Pushing the Boundaries on the MHM Dialogue in India

CALLS TO ACTION FOR MENSTRUAL HYGIENE MANAGEMENT (1 of 2)

	What exists across the MHM value chain					Calls to Action
	Awareness	Access	Use	Disposal	Treatment	
Convergence across Ministries						The key Ministries noted here to form an inter-ministerial group to support implementation of coordinated, comprehensive MHM programs across the country
Ministry of Health and Family Welfare	Menstrual Hygiene Scheme Rashtriya Kishor Swasthya Karyakram					<ul style="list-style-type: none"> • Offer a wider product basket, including disposable sanitary pads, reusable products (cotton pads, menstrual cups), and compostable pads. • Expand availability and access to information, support structures and services across the MHM value chain in communities and institutional settings • Endorse implementation of MHM programs in schools and rural communities, as well as urban communities, and worksites.
Ministry of Women and Child Development	SABLA, through Anganwadi centers					
Ministry of Rural Development	National Rural Livelihood Mission					
Ministry of Human Resource Development	National Guidelines for MHM in schools					<ul style="list-style-type: none"> • Operationalize guidelines at the state and district level with corresponding budget allocations • Model convergence across government departments for MHM programming
Ministry of Drinking Water and Sanitation	SBM (Gramin) Guidelines on gender issues in sanitation			SBM (Gramin) Guidelines on gender issues in sanitation		<ul style="list-style-type: none"> • Raise awareness on MHM and break the silence and stigma around menstruation. • Enable safe management of menstruation for all women and girls inside and outside the home. • Offer safe and appropriate waste management solutions in addition to incinerators, specifying their suitability for various types of products, and their environmental impact • Encourage the operationalization of the MHM Guidelines in Schools • Disseminate and capacitate stakeholders at all levels on SBM gender guidelines and how they can be integrated into ongoing work, including collective behavior change, resource allocation, monitoring and verification of open defecation free status.

Pushing the Boundaries on the MHM Dialogue in India

CALLS TO ACTION FOR MENSTRUAL HYGIENE MANAGEMENT (2 of 2)

CALLS TO ACTION FOR MENSTRUAL HYGIENE MANAGEMENT (2 of 2)						
	What exists across the MHM value chain					Calls to Action
	Awareness	Access	Use	Disposal	Treatment	
Ministry of Environment and Forests				Solid Waste Management Guidelines 2016 <ul style="list-style-type: none"> • Manufacturer responsibility for product cover design • User responsibility for waste segregation • Bio-medical Waste Management guidelines • Specifications for transportation and incineration for bio-medical waste 		<ul style="list-style-type: none"> • Communicate the categorization of menstrual waste to all relevant stakeholders • Specify standards for waste management, including their suitability for various types of products • Align categorization and positioning of menstrual waste across Government Ministries • Develop and disseminate IEC materials on menstrual waste management (from segregation, disposal, transportation, containment, and treatment)
Ministry of Urban Development				SBM (urban)		<ul style="list-style-type: none"> • Offer safe and appropriate waste management solutions in addition to incinerators, specifying their suitability for various types of products, and their environmental impact. • Development of protocols, standards and accreditation for incinerators
Bureau of Indian Standards		Standards only exist for disposable sanitary napkins				<ul style="list-style-type: none"> • Develop standards for a wider basket of menstrual hygiene products, including reusable products, disposable pads, and compostable pads. • Existing standards to go beyond guidance on product dimensions and materials to include environmental impact, user preferences, hygienic production and packaging, and accurate and comprehensive product information on packaging.