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Livelihood in Hygiene Promotion: Opportunities and Challenges in Sanitary Napkin Enterprise selected District of Maharashtra

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Acronyms

ANM	Auxillary Nurse Midwife
APL	Above poverty line
BIS	Bureau of Indian Standards
BPL	Below poverty line
FGD	Focus group discussion
GOM	Government of Maharashtra
IAY	Indira Awas Yojana
IIT	Indian Institute of Technology
LHV	Lady Health Visitor
NREGA	National Rural Employment Guarantee Scheme
PHC	Primary Health Care Centre
RTI	Reproductive Tract Infection
SHG	Self-Help Group
TISS	Tata Institute of Social Sciences
UNICEF	United Nations Children's Fund
RSBY	Rashtriya Suraksha Bima Yojana
RWSS	Rural Water Supply and Sanitation
SABLA	Rajiv Gandhi Scheme for the Empowerment of Adolescent Girls
WSSD	Department of Water Supply and Sanitation
SGSY	Swarna Jayanti Gram Swarozgar Yojana Scheme
UTI	Urinary Tract Infection

Glossary

Anganwadi	Community child-care centre for pre-school children.
ASHA	Accredited Social Health Activist, Community Health worker.
BIS	National Standards Body of India which covers product quality certification.
Dalit	Members of Scheduled Caste recognised in the Indian Constitution as socially disadvantaged.
District	A sub-division of a state.
Gram Panchayat	Elected village council.
Gram Sabha	A body consisting of persons who are listed in the electoral roll for a Gram Panchayat.
ICDS	Government of India's Scheme for early childhood development.
Inclusive Development	Development approach which integrates the standards and principles of human rights: participation, non-discrimination and accountability.
Indira Awas Yojana	Government of India's social welfare programme to provide housing for the rural poor.
Lingayat	An independent religious sect. It is also a part of the caste system in Maharashtra and Kanataka.
NREGA	The Government of India Act that guarantees hundred days of wage-employment in a financial year to a rural household whose adult members volunteer to do unskilled manual work.
Rashtriya Suraksha Bima Yojana	Government of India's scheme to provide health insurance coverage for Below Poverty Line (BPL) families.
Sarpanch	Head of the Gram Panchayat.
Scheduled Castes	Castes recognised by the Indian Constitution and given special protection as the most vulnerable and discriminated against in Indian society.
Scheduled Tribes	Constitutionally recognised and protected aboriginal population groups
Yellama	A goddess popularly worshipped in rural regions of Andhra Pradesh and Karnataka.
Zilla Parishad	Body of elected representatives at the District level.

Foreword

The Knowledge Community on Children in India (KCCI) is a partnership between the Government of India and UNICEF, the aim of which is to fill knowledge gaps and promote information sharing on policies and programmes related to children in India. In 2011, under the aegis of this initiative, 40 graduate students from India and across the world undertook fieldwork and documented initiatives focused on child rights and development. Their vibrant perspectives, commitment and hard work are reflected in these studies, published by UNICEF.

The nine initiatives were documented in 2011. The teams looked at a range of initiatives at different levels of intervention – from community radio in tribal areas of Shivpuri in Madhya Pradesh to a complaints handling mechanism of the National Commission for the Protection of Child Rights at the national level. The lens applied to these studies is to identify the essential elements that go into making a model intervention successful and sustainable.

UNICEF recognises the potential and power of young people as drivers of change and future leaders across the globe. The KCCI Summer Internship Programme aims to support the development of a cadre of young research and development professionals with an interest, commitment and skills in promoting and protecting children's rights. UNICEF will continue this collaboration with young researchers, the Government of India and academia, so as to bring fresh perspectives and energy to development research and showcase examples of how it *is* possible to ensure that the rights of *every* child in India are fulfilled.



Karin Hulshof
Representative
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Executive Summary

The Government of Maharashtra-sponsored Jalswarajya Project aims to increase access to drinking water and sanitation services to rural households. Under the Women's Empowerment Cell (WEC) of the Jalswarajya Project, local village women receive governmental training and support to form self-help groups (SHGs). Thus far, ten SHGs throughout Maharashtra have set up sanitary napkin enterprises, including in Jeur village in Maharashtra. The sanitary napkin enterprise of Jeur has been particularly successful economically and valuable lessons can be learned from the unit's strategies and experience.

Within the framework of health and sanitation promotion policies, especially in rural India, menstrual hygiene has remained neglected contributing to poor health outcomes in women's health. As good menstrual health includes the use of absorbents such as cloth or sanitary napkins, understanding the opportunities and challenges encountered by the sanitary napkin enterprise in Jeur along with the current menstrual hygiene practices and barriers to menstrual health amongst Jeur women is imperative to the broader application and scale up of the Jeur approach to other relevant contexts.

The two objectives of this study were to a) extract lessons learned by tracing and documenting the enterprise's history from conception to current functioning, and b) investigate the awareness of menstrual hygiene practices in Jeur amongst women, adolescent girls, health care providers and other professionals and identify barriers to adoption of healthy practices.

For the first objective of the study the methodology consisted of secondary data collection and interviews with key informants. These helped to throw light on the genesis and current functioning of the enterprise along with the opportunities and challenges surrounding entrepreneurship and marketing of menstrual health concepts and sanitary napkins. The engagement of the SHG, the structure of the production unit, and its finances were other important aspects examined.

For the second objective of the study the methodology entailed focus group discussions (FGDs) and semi-structured interviews with a range of respondents including SHG women, women working with the Jeur Unit, village women and adolescent girls. These research tools sought to assess menstrual hygiene practices and awareness levels among various sections of the village community including the socio-economically underprivileged Dalit and Muslim women. In addition, health care workers and other professionals were interviewed to understand their strengths and limitations in promoting hygienic menstrual practices. The focus of interacting

with all of the above was to understand challenges to and facilitating factors for practicing good menstrual hygiene, including the potential role the Jeur sanitary napkin unit can play in promoting menstrual hygiene knowledge, awareness and practices in Jeur.

Analysis of the responses revealed that lack of awareness of good menstrual health, cultural factors, the cost of purchasing sanitary napkins, and inability to dispose them discreetly were the main obstructions to use of napkins and to improved menstrual health in Jeur. The recommendations included in the present report address these awareness, disposal and cost barriers.

Based on the findings, four key lessons emerge from the study. These refer to the importance of entrepreneurial and leadership skills, ensuring sustainability, enhancing the potential for social impact, and ensuring the community's participation and acceptance. Incorporating the lessons learned the recommendations made in the report provide an informed basis for the improvement of the Jeur model, and its replication elsewhere.

As the evidence gathered by the report shows, the presence of a sanitary napkin enterprise in Jeur creates an opportunity for the enterprise to serve as a vehicle to promote menstrual hygiene awareness. In view of its success, with the support of the Government of Maharashtra and development agencies, the model of the enterprise is beginning to be replicated throughout rural communities of Maharashtra. This reinforces its applicability to other states in India or to countries facing similar challenges in promoting menstrual health awareness and practices.

Background

Sanitation in India

Sanitation is one of the basic determinants of quality of life. The current definition of sanitation by the World Health Organisation (WHO) includes personal hygiene, home sanitation, safe water, garbage disposal, excreta disposal and waste-water disposal¹. Since the late 19th Century, following the work of John Snow, a direct link has been established between good sanitary practices and disease prevention². Hence sanitation needs special focus in policies of preventive health care.

It has been estimated that India ranks as one of the worst countries in the world for sanitation, second only to China.³ UNICEF India (2008) estimates that only 31 per cent of India's population use improved sanitation and only 21 per cent use improved sanitation facilities in rural India⁴.

Menstrual hygiene and its weak positioning

Menstrual hygiene is given minimal importance in the framework of sanitation and is often a neglected aspect of health related policies.⁵ The practice of good menstrual hygiene reduces the incidence of reproductive tract infection (RTI). The consequences of RTIs are severe and may result in significant negative impact to a woman's health. They include chronic pelvic pain, dysmenorrhea (painful periods) and in severe cases infertility.

Challenges to menstrual hygiene promotion in India

A 'culture of silence'⁶ has prevailed resulting from the long-standing taboo attached to menstruation and menstrual hygiene practices in India. Women and adolescent girls are often hesitant to broach these topics even amongst their closest kith and kin.⁴ The stigma attached to menstruation has contributed to the dearth of knowledge amongst females in both urban and rural communities as to the correct menstrual hygiene practices. In addition to the lack of factual information many women continue to practise cultural traditions related to menstruation, such as practices of seclusion at home, refraining from daily household tasks and prayer, and remaining absent from work.⁴ These practices reflect the perception of menstrual blood loss as an 'impure' state and not as a normal human physiological phenomenon.⁷ Consequentially the constraints placed by these social and cultural norms not only impact on the health but also on the livelihood and opportunities of women. Women struggle to sustain continuous employment and the education of adolescent girls likewise is disrupted due to periodic menstruation-related absences.

In addition to poor awareness and traditional cultural practices, other important barriers to the practice of menstrual hygiene within village communities in India are the lack of economic power and empowerment of rural women. A rural woman's life is confined to the walls of her home or to engaging in unpaid labour in the fields. She seldom has access to any source of education or formal paid employment. Her economic, social and political disempowerment restricts her ability to take her own decisions or to act freely on her opinion, limits her access to resources, and bars her from making choices important for her overall well being. Restrictions on physical mobility and economic dependency together constitute a major barrier to a woman's ability to make her choices regarding practices of menstrual hygiene.

The patriarchal structure of Indian society remains one of the biggest challenges to the healthy development of women and girls. The shame and myths associated with menstruation, the secondary treatment meted out to the girl child, the nutritional biases which a female faces from her childhood, ignorance, illiteracy, lack of resources and inability to take decisions are some of the factors which impact women's health. While an average urban Indian woman has to some extent given voice to her concerns or managed to address them, the woman living in the rural areas still grapples with problems and taboos related to her reproductive and menstrual health.

The limited solid waste management systems and the lack of mechanisms for disposal of sanitary napkins in rural areas is a major practical concern which makes the switch from cloth to napkins difficult.

Current menstrual hygiene practices in Maharashtra

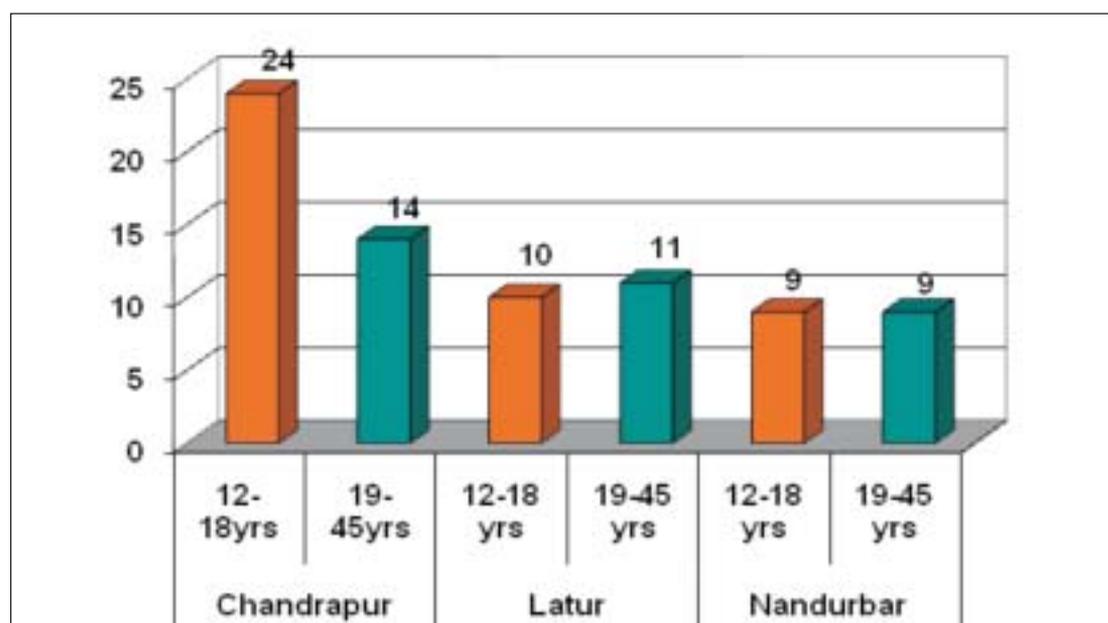
Good menstrual health encompasses personal hygiene, mental health, adequate nutrition and correct use of absorbents such as cloth or sanitary napkins. Sanitary napkin use as an alternative absorbent for menstruation is largely a Western practice and is perceived as a vehicle to improved hygiene. Prevalence of sanitary napkin use remains low in India in both rural and urban communities.⁸ A baseline survey conducted in March 2011 in 170 *Gram Panchayats* in three districts of Maharashtra suggests that sanitary napkins do not appear to be a preferred alternative (Figure 1) and accordingly, the prevalence of sanitary napkin use is low (Figure 2).⁹

Figure 1: Ideal absorbent to be used during menstruation

[All figures in percentage]

Ideal absorbent to be used during menstruation	Chandrapur		Latur		Nandurbar	
	12-18yrs	19-45yrs	12-18 yrs	19-45 yrs	12-18 yrs	19-45 yrs
Sanitary napkin (SN)	27	14	7	11	8	10
Cloth	60	68	85	85	82	84
Others (cotton/gauze/paper/etc)	2	2	2	2	5	4
Nothing	0	1	2	<1	1	1
Total	100	100	100	100	100	100

Figure 2: Use of sanitary napkins in three districts of Maharashtra

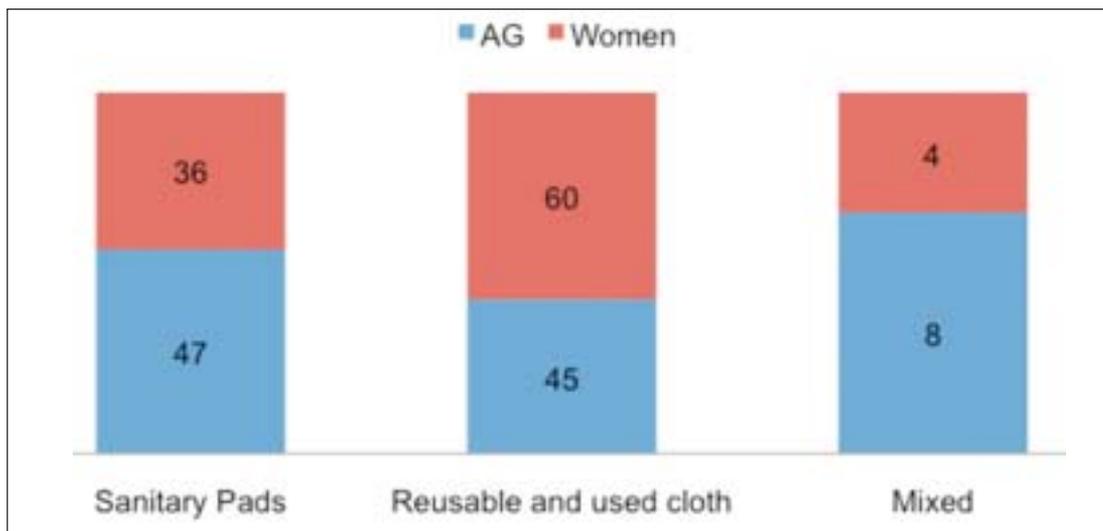


Earlier, UNICEF, in partnership with the Water Supply and Sanitation Department, Government of Maharashtra (GOM), conducted a study published in October 2010 (See Figure 3). The study surveyed over 400 adolescent women, girls and frontline workers in villages with Sanitary Napkin Production Units in Maharashtra.¹⁰ According to the study:

- ◆ 53 per cent of the women interviewed reported using cloth during menstruation and 42 per cent reported using sanitary napkins. The usage of sanitary napkins was higher amongst adolescent girls compared to women in each community.
- ◆ 46 per cent of sanitary napkin users were from above poverty line (APL) families and 41 per cent from below poverty line (BPL) families*

*This survey was conducted by the sanitary napkin unit in areas adjoining the unit and therefore may show higher than expected results.

Figure 3: A study of menstruation health in Maharashtra revealed instructive data on usage of absorbents among adolescent girls (AG) and women (in %)



In another study, Mudey et al (2010) show that of the adolescent girls who developed RTI, 66.7 per cent used cloth and only 12 per cent used sanitary napkins. However, using cloth in itself does not increase chances of RTI. The concern arises from the methods of use: prolonged use of the same cloth, not washing the cloth properly, and not drying the cloth in the sun. All these contribute to the development of infections.

A holistic model for promoting menstrual health

In view of the above it is clear that the issue of menstrual health practices in rural India need special focus and attention at the policy level. Due to the intricate relationship between practices of menstrual hygiene and gender relations within rural Indian society, the issue can only be addressed effectively through a holistic approach that encompasses economic empowerment of women along with social awareness generation that demystifies cultural beliefs and practices related to menstruation, and creates a correct understanding of menstruation as well as menstrual hygiene and its impact on reproductive health.

The Nirmal Sanitary Napkin Enterprise in Jeur, Maharashtra follows the above approach. Supported jointly by UNICEF and GOM, the Jeur enterprise was created in 2008 by an SHG, under the aegis of Jalswarajya Project. The enterprise currently employs more than 20 unit workers, and produces about 75 sanitary napkins per day, selling approximately 30 percent of production monthly. Along with some economic success, the unit has created opportunity for livelihood options, empowerment of women, and increased menstrual hygiene awareness in some sections of the Jeur community.

Figure 4: Women at work in Nirmal Sanitary Napkin Unit, Jeur



Research Objectives and Methodology

Objectives

This research report presents a case study of the Sanitary Napkin Enterprise of Jeur. Its overall objective is to document the functioning, processes, opportunities and challenges of the enterprise, along with its potential for impact on menstrual hygiene awareness and practices in Jeur. By seeking to understand the lessons learned in developing and maintaining the Sanitary Napkin Unit (the unit) in Jeur, and its overall effect on menstrual hygiene awareness and practices in the community surrounding the unit, the report hopes to identify key lessons that can guide similar enterprises throughout Maharashtra and provide effective ways in which to replicate this model and its holistic approach elsewhere.

The research undertaken for the study was guided by two main objectives:

Objective 1: Extract lessons learned by tracing and documenting the Jeur enterprise's history from conception to current functioning, with a view to assess its sustainability and replicability.

Objective 2: Investigate the awareness of menstrual hygiene practices among women, adolescent girls, health care providers and other professionals, and the challenges to good menstrual health in Jeur.

Research methodology

The present study relied on desk research and secondary sources for data collection as well as on interviews with key respondents and focus group discussions for gathering primary data. The two methods together yielded both quantitative information and qualitative perceptions which inform the present report.

Specific to **Objective 1**, the following investigating tools were used:

- 1) Key Informant Interviews: The main contributors and facilitators of the Sanitary Napkin Enterprise were identified and personal interviews were conducted with each of them.
- 2) Secondary Data Collection: The data sources reviewed included: the enterprise's financial and production records to date, Bank of India records of the enterprise, photos and videos of the enterprise process obtained from unit members, previous surveys and reports of the unit, and government documentation created by Jalswarajya project officials.

For **Objective 2**, the following tools were used:

- 1) Focus Group Discussions (FGDs). These were held separately for engaging with the following sub-groups: (i) Women working at the Sanitary Napkin Unit (ii) Women from the village not affiliated with the unit (iii) Women from the Muslim community (iv) Women from the *Dalit* community (v) Adolescent girls at the *Zilla Parishad* high school and (vi) Adolescent girls in the *Dalit* community. (See Annexure I for the FGD questionnaire and Annexure II for FGD composition).
- 2) Semi-Structured Interviews. These were targeted at health care workers and other professionals who were known to generate awareness of menstrual hygiene practice. The interviewees included Lady Health Visitors (LHVs), ASHA workers, Anganwadi workers, and high school female teachers. A detailed questionnaire (Annexure III) was used to conduct interviews focusing on the following key questions:
 - ◆ What are the current practices of menstrual hygiene in Jeur village?
 - ◆ What is the level of awareness amongst women and adolescent girls of good menstrual hygiene?
 - ◆ What is the level of knowledge amongst health care providers and other professionals in generating good menstrual hygiene awareness?
 - ◆ To what extent does the Sanitary Napkin Unit in Jeur influence menstrual hygiene practices?
 - ◆ What are the challenges to the practice of good menstrual hygiene?

Limitations

- ◆ The Jeur enterprise did not have accurate or up-to-date data on raw materials and financial records, which impaired secondary data collection.
- ◆ Large numbers attended FGDs making it difficult to manage the group discussion and ensure all voices were heard.
- ◆ Women were reluctant to speak about menstrual health issues in most cases and often gave collective answers in an FGD making it difficult to obtain individual insights.
- ◆ As the research team was hosted and facilitated by the Jeur unit and the dominant political family of the village, such association may have biased some of the responses given during key informant interviews as well as in FGDs.
- ◆ It was noted in many instances that interviewees tried to give the 'right' answers. Perhaps this was done to give a good impression or to prevent researchers from probing further.

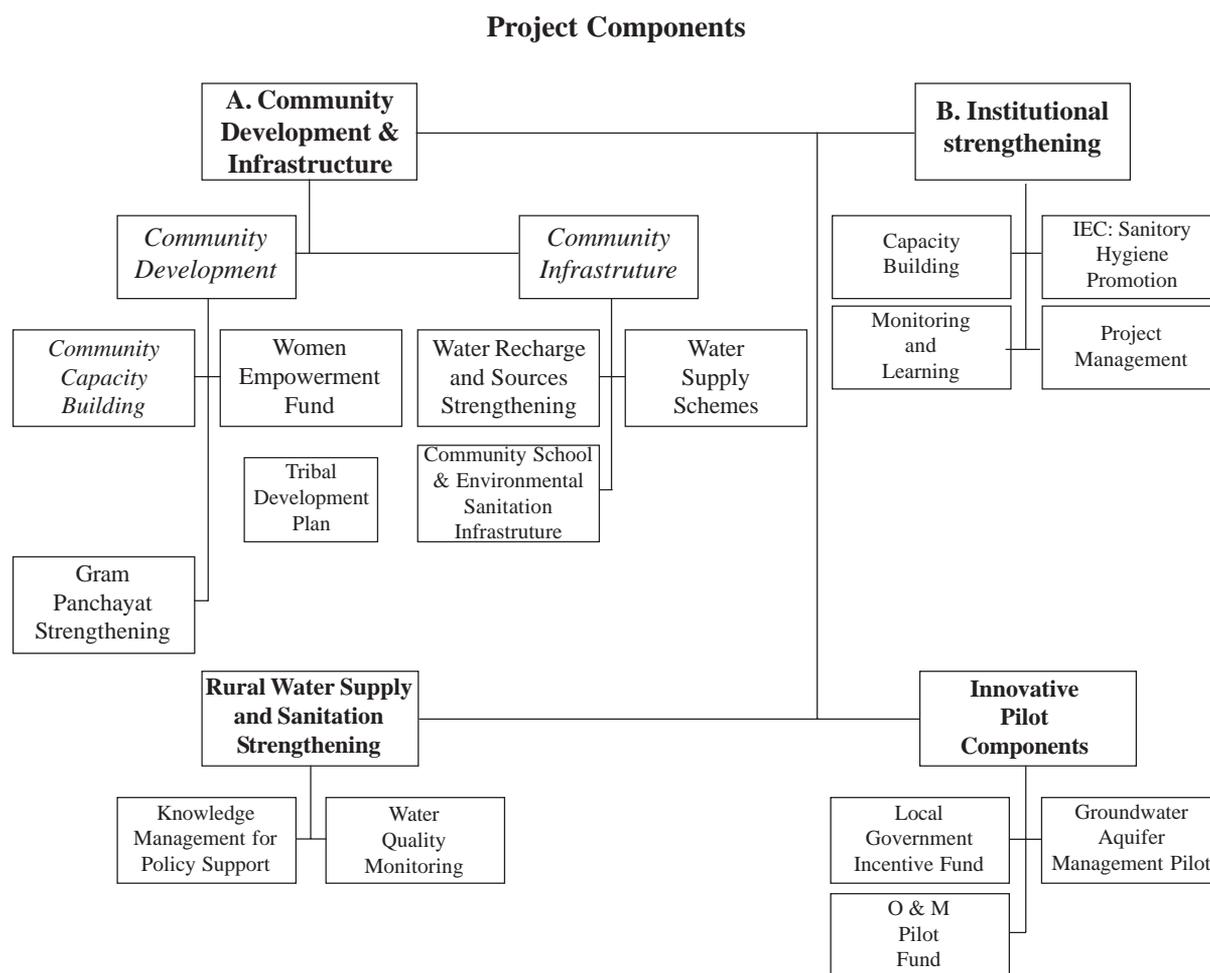
The Genesis of the Sanitary Napkin Unit in Jeur

The Jalswarajya project

Operating under the aegis of GOM's Department of Water Supply and Sanitation (WSSD), the Jalswarajya Project aimed to increase access to drinking water and sanitation services to rural households. Beginning in 2003 with support from the World Bank amounting to US\$ 181 million, the project has provided access to clean drinking water to more than 1.2 million households.¹¹ Another important initiative aimed at creating "open defecation free" zones, building low-cost toilets, and incentivizing households to build toilets. The Jalswarajya Project served 26 of the 33 districts in rural Maharashtra.

The project is highly regarded for its integration of community participation and local governments in its execution strategy. It attempted to decentralise the Rural Water Supply and Sanitation (RWSS) service delivery to the local governments and communities. In an effort to empower villages, with support from Jalswarajya officials, local *Panchayats* were made responsible for managing and maintaining their own water supply schemes. Village residents likewise were obliged to apply to the district government and organise and execute their own local projects. These villages contributed five to ten percent of the cost of the local project, and the Jalswarajya Project contributed the remaining funds.

Figure 5: Components of the Jalswarajya Project*



*Figure provided by Dr. B T. Kazi, TISS.

The three components of the Jalswarajya Project focus on: a) water, b) sanitation, and c) women’s empowerment. Recognising that women play a major role in fetching and managing water for their families, the Women Empowerment Fund along with a Gender Cell was created. The project also encouraged women’s involvement in the *Gram Sabha*. Under the Gender Cell, the Jalswarajya Project organises, trains, and supports women’s Self Help Groups (SHGs). The aim of these SHGs is to generate livelihood opportunity and empowerment of women through the creation of a small business or group savings venture. Other government schemes, which facilitated the Jeur project, are delineated in Annexure IV.

The demography of Jeur village

Jeur is a small village situated on the Maharashtra – Karnataka border, in Akkalkot Block, Solapur District of Maharashtra. Being situated on the border of two states offers a kaleidoscopic culture to the village. The inhabitants are multilingual and can speak Hindi, Marathi and Kannada, and include followers of Buddhism, Hinduism, Islam, Sikhism, and devotees of *Yellama*. The

population consists of various castes including the dominant castes (Lingayat, Mali), the under privileged *Dalit* community, various sub-castes of Muslims and denotified tribes. Scheduled Castes and Schedules Tribes respectively account for about 10 per cent and less than 1 per cent of the village population.

According to the 2001 Census, the population of the village is 7,476.¹¹ Of the 1,374 households in the village, 577 are above poverty line (APL), and 375 are below poverty line (BPL). The sex ratio is 3,827 males and 3,649 females. The majority of households own land which makes the village relatively affluent. Those who do not own land are daily wage earners or agricultural labourers. The women belonging to the upper caste and the land owning class engage themselves in tailoring or arts and crafts.

According to the village *Panchayat* data, the village has ten *anganwadis*, one private school and three *Zilla Parishad* schools. The Primary Health Centre (PHC) is situated in Jeur; it covers 18 villages and 40,000 people. There are two male medical officers, one lady LHV, five auxiliary nurse midwives (ANM) and four ASHA workers allocated for Jeur. There is an incinerator for biological waste (including sanitary napkins) for the use of the PHC staff and patients.

The village has gained much recognition in the past few years owing to the Sanitary Napkin Unit. This unit is a unique and innovative venture which has earned Jeur considerable media coverage.

Figure 6: Map of Maharashtra. Location of Jeur



The formation and evolution of the Jeur enterprise

In 2008, ten women, along with a man named Mr. P (who is married to one of the ten women), decided to start saving money in order to set up an SHG. Mr. P., an entrepreneur from Jeur, learned about sanitary napkin enterprises from the State Gender Cell of the Jalswarajya Project. Along with an official from the Jalswarajya Project, Mr. P took some of the women to visit a pilot sanitary napkin unit in Tamil Nadu. Recognising the unit as a potentially viable venture, Mr. P utilised his network in the village and in the district to start the process of creating a unit. The enterprise received assistance from Women on Wings, a Dutch NGO specialising in sanitary napkin production, which was supported by UNICEF. On October 8, 2008, the sanitary napkin enterprise of Jeur was officially formed. The Sanitary Napkin Unit in Jeur was registered as an SHG.

In November 2009 UNICEF started supporting the creation of similar units, by providing marketing training and technical support to ten SHGs. As more units were founded in rural Maharashtra, with UNICEF's technical support, the Jeur unit became a training centre and a wholesaler of machinery and raw materials in addition to continuing with its production of sanitary napkins. Importantly, UNICEF continues to be involved in improving the unit's marketing strategy, paving the way for the unit to be also a vehicle for menstrual hygiene awareness in Jeur.

In 2010, UNICEF supported the WSSD's efforts to help the sanitary napkin enterprise to obtain the *BIS* certification standard for their product. The enterprise received a bank loan of 25 lakhs under SGSY.¹² A major breakthrough in sales came in the form of a huge order of 1,31,000 packets of sanitary napkins (each packet containing 8 pads) from the Women and Child Welfare Department. The enterprise also began producing post partum pads ordered by the village PHC to be given free of cost after deliveries.

The Sanitary Napkin Enterprise of Jeur currently holds an economically viable production operation. Over 2,000 packets are produced monthly, with each packet containing eight sanitary napkins. Approximately 30 per cent of this production is sold monthly. The unit is open for production and sales six days per week, with ten to fourteen women working at the unit on an average work day. The staff consists of the head entrepreneur/founder, one staff supervisor, and 20 women workers who work in two shifts, one from 8 am to 4 pm and the other from 10 am to 6 pm. The workers share production and housekeeping tasks equally, with three women designated for marketing-related tasks.

Opportunities and Challenges

An analysis of the Jeur unit's evolution and functioning reveals several facilitating factors along with some challenges experienced by the unit. These are reviewed below along five key parameters:

Entrepreneurship

The lead entrepreneur who has played a key role in the enterprise right from its commencement is to a large extent responsible for the unit's success as seen below.

Opportunities:

- ◆ The entrepreneur through his networking skills and ability to mobilise community resources was able to garner the support of government and public officials and take advantage of various government-supported schemes. This has been beneficial in enabling the unit to avail of the water and electricity supply at reduced rates, receive subsidised government loans, and use the *Gram Panchayat* infrastructure to house the enterprise.
- ◆ The vision and foresight of the entrepreneur has been instrumental in helping him sustain the enterprise and earn profits. For example, he purchased extra machinery with a view to selling it at higher price to other developing enterprises.
- ◆ Along with his forward thinking strategies the entrepreneur has sought innovative methods to further the enterprise. For example he developed a mechanism to power machinery using an air compressor instead of a pedal mechanism. He also sent samples of the sanitary napkins to the Indian Institute of Technology in Mumbai to improve their size and shape.
- ◆ The entrepreneur's leadership and management skills have earned him the respect and support of the unit's workers and colleagues, attracted continued investment, and are vital to the continued running of the enterprise. (The role of the entrepreneur and other stakeholders involved with the enterprise is briefly described in Annexure V).

Challenges

- ◆ Although the entrepreneur has demonstrated valuable entrepreneurial skills, which facilitate the running of the project, group dynamics is lacking. The potential of the SHG women or of those working in the unit, to supplement his role and to also participate in the management of the unit, is not sufficiently explored.

- ♦ The entrepreneur views profit as the main measure of success. As a result, the benefits of the social impact of the unit, such as improving menstrual hygiene awareness and practices or acting as a vehicle for female empowerment and improving livelihoods are not adequately addressed.

Marketing

Opportunities

- ♦ The media coverage helped the enterprise gain credibility and recognition from local community members. Due to the stigma associated with menstruation, initially the unit was forced to rely on covert marketing of its product. However, this pressure to use covert marketing tools significantly decreased when a local newspaper and television news programme ran segments covering the enterprise.
- ♦ The connection with the Jeur PHC has been very useful for sustained business. The unit has a link with the PHC which has been beneficial both for marketing its product and also for procuring orders for supply of postpartum sanitary pads.

Challenges

- ♦ Local marketing remains a challenge for the unit. The opposition from the community during the establishment of the unit has inhibited the unit from aggressively marketing to local customers.
- ♦ Consequent to the above, the advertising for the unit and its product is not adequate. Therefore, as noted elsewhere in the present study, local women largely are not aware of the existence of the unit.
- ♦ Another barrier to expanding local marketing channels is the prevalence and impact of caste system. Since the unit largely employs upper caste women, there is some resistance among the unit's workers to visit hamlets such as those of the *Dalit* community or of the denotified tribes for door-to-door marketing.
- ♦ At present the unit is dependent on government orders for sanitary napkins. Should the situation change, assurance that the local demand of the product is sufficient for the unit to run independently from government orders is necessary. For the venture to be successful and self-sustainable it is important that other sales options are identified.

The unit

Opportunities

- ♦ The unit is in an opportune location in the village. Being situated on the main road of the village makes the unit easily accessible and noticeable for any passerby. It also enables women workers to reach the work place with relative ease.
- ♦ The quality of the product initially was a major concern which has now been successfully addressed with the unit attaining the recognition of BIS.

Challenges

- ♦ The current productivity of the unit is hindered by frequent power cuts, which stops the production process for hours at a stretch.
- ♦ Expensive raw materials (some of which need to be acquired from other states and countries) and their inconsistent availability increases the cost of production and hampers continuous production.

Finances

Financial viability is critical to the success of the venture. A detailed breakdown of costs and revenue is presented in Annexure V. Here only the facilitating factors and challenges are noted.

Opportunities

- ♦ A positive contributor to the economic health of the enterprise was the multiple large government orders for sanitary napkins. In addition, the enterprise utilised special loans for SHGs initially provided by the Jalswarajya project and was able to request further loan funding from the Bank of India. This support from the Government and the Bank was crucial for the financial health of the enterprise.

Challenges

- ♦ Inadequate accounting poses a challenge (as much to the unit as to the researchers). For example, the cost of raw materials per month or the production costs per unit vary and are difficult to decipher, which in turn makes it difficult to clearly determine the profit margin.
- ♦ As a result of the focus on profit-making, the wages of the unit's workers remain low. They are limited to Rs.50-70 per day, far below the minimum agricultural wage for Jeur Village at Rs.100 per day. The above rate consequently is not competitive enough to serve as an economic incentive to attract workers to the unit.

SHG-unit linkages

Opportunities

- ◆ Through affiliation to the SHG and to the sanitary napkin unit, the women are able to benefit from social capital formation. In addition to gaining from the camaraderie and interpersonal relations, women view their time at the unit as a break from household responsibilities and an opportunity to earn and learn a trade.
- ◆ Prior to the unit's creation, women (the majority from the dominant Lingayat caste) were confined to their homes. The SHG and unit have provided an opportunity for women to leave the home with legitimate purpose giving them a sense of freedom.
- ◆ The unit provides an employment alternative to those women who do not wish to (and can afford not to) engage in manual labour. For many women the wage – although not equivalent to working in the field – supplements their household income, or serves as pocket money to spend according to their own wishes, including for pursuing further education.

Challenges

As many members of the SHG noted, SHG meetings were no longer held and aside from the work at the unit no external activities were taking place. Worse, even though women were contributing to SHG savings, there was no procedure to enable the women to obtain loans. Only the President and Secretary of the SHG had any knowledge of the financial details of the SHG. This system does not allow for checks and balances within the SHG, and does not encourage full/active participation by all SHG members. Therefore, there is the risk that saved amounts may be monopolized by the President and Secretary, that members of the SHG may not receive loans, or further, that embezzlement or abuse of funds may occur.

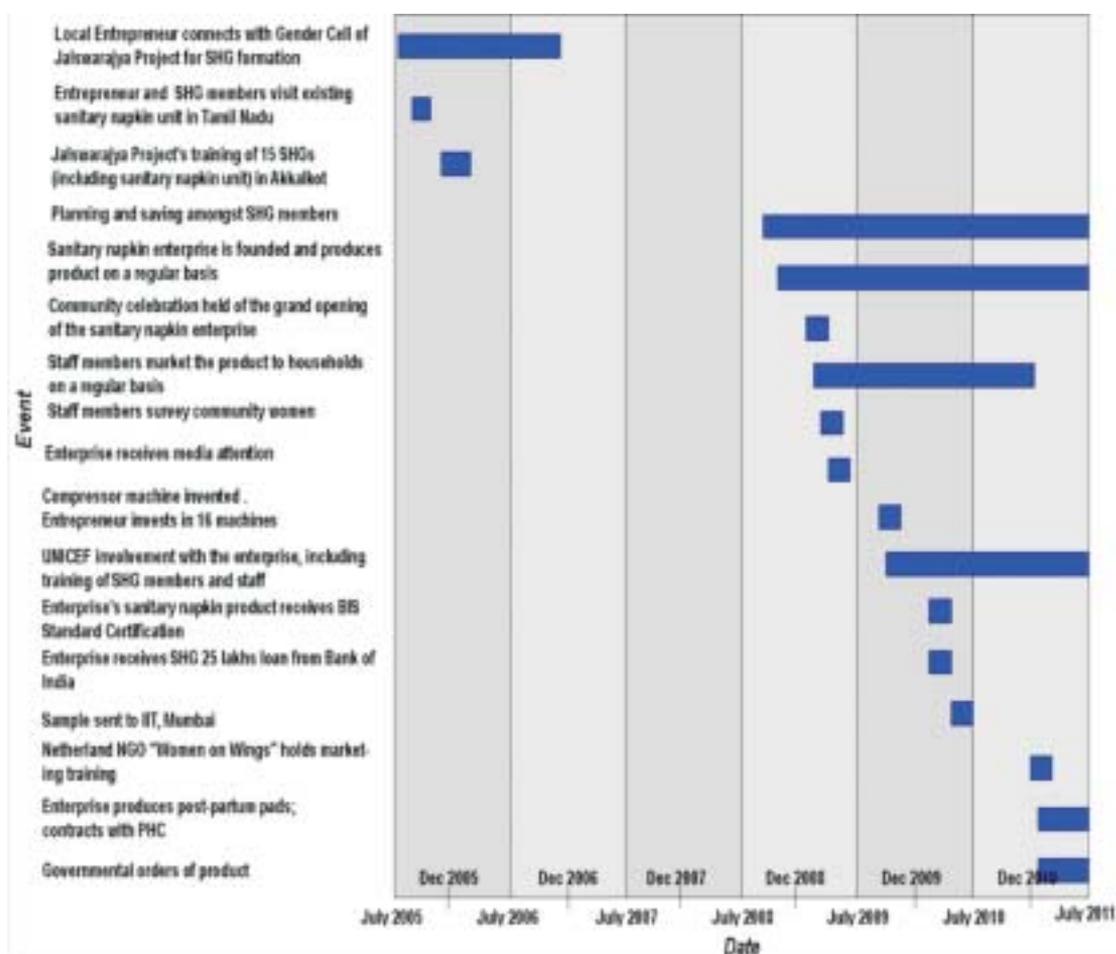
Progress and Results

These are analysed below along the two main objectives of the study namely, assessing the Unit's progress, and the extent of awareness of improved menstrual hygiene practices among Jeur women.

Objective 1: The chronology of the unit

The Jeur unit's development and progress since its inception were reconstructed from the unit's own and other external sources and documentation. Figure 7 includes a graphical representation of the unit's history. (Annexure VI presents the detailed timeline of the unit's chronology).

Figure 7: Gantt Chart: A graphical representation of the chronology. (Length of bar represents duration of time).



Objective 2: Menstrual hygiene awareness in Jeur

A total of six FGDs were conducted along with interviews with key professionals. The resulting data were analysed using the framework of the research objectives, and the findings are tabulated below. (As noted earlier, Annexure I and II provide details of the FGD participants and the questions used)

(A) Current practices of menstrual hygiene in Jeur village

Table 1: FGD results - menstrual absorbent use

FGD	Menstrual Absorbent Use
Dalit Women	3 out of 6 women use sanitary napkins, the remaining use cloth.
Muslim Women	All the women present for the FGD use cloth.
Village Women	They use some woollen knitted cloth/flannel*. They do not use pads.
Unit Women	All the women use napkins and change their napkins twice a day except one who uses cloth.
Adolescent Girls: High School	All the girls except one use cloth.
Adolescent Girls: Dalit Community	Only one girl among the group had attained puberty and she uses napkins.

* See Annexure VII for sample cloth.

Figure 8: FGD with women of Dalit community



(B) Awareness of good menstrual hygiene among women and adolescent girls

Table 2: FGD Results – Hygiene Awareness

FGD		Awareness of Menstrual Hygiene Practices and Consequences of Poor Menstrual Hygiene
Dalit Women	Cloth	The women change the cloth 2-3 times a day. Some of them dry it in sunlight, some in the bathroom. They relate poor hygiene to white discharge, pain when passing urine, blisters, and itching and skin rashes.
	Napkins	They change the pads for comfort and when there is heavy flow. For disposal, they wrap them in a plastic bag and throw them near public toilets, the bush, garbage or a place where no one can see them (forest). One respondent even cleans the napkin before throwing it in the garbage. An ASHA worker says she burns the napkins.
Muslim Women	Cloth	On the first day of the period they fold the cloth they use to make it thicker as maximum bleeding takes place on that day. According to some, “whether you bleed or not you have to change the cloth twice a day.” The women wash the cloth for re-use when the men are not present or at night. They wash it in the bathroom. Some women put the cloth on the terrace in the sunlight to dry.
	Napkins	None of them use napkins
Village Women	Cloth	They change the cloth twice a day except one woman who changes about three to four times in a day. They all wash it with soap and dry it in the sun. Once they have finished using the cloth they bury it in a ditch, near their house. According to one woman, “If you don’t keep the cloth clean you will get sick. You will get worms and insects on the cloth. The cloth will also get bacteria.” And as another woman noted, “You can get an infection and then you get fever, your period smells, you get more discharge.”
	Napkins	They do not use napkins.
Unit Women	Cloth	Only one woman uses cloth .She changes it twice a day and dries it in the sun.
	Napkins	Those that use napkins change them twice a day. If bleeding is less, they change it only once. One younger woman felt that irrespective of the intensity of bleeding one pad must not be used for more than 3-4 hours. The women wrap the used napkin

FGD		Awareness of Menstrual Hygiene Practices and Consequences of Poor Menstrual Hygiene
Adolescent Girls: High School	Cloth	in a rag or newspaper and put it in the trash or burn it. Some women wash the napkin before disposing of it. The napkins are discarded in the open trash areas.
	Napkin	Girls use cotton cloth and dry it in sunlight. They wash the cloth and change it three times a day. Girls who use sanitary napkins prefer napkins “because the cloth has germs, and it is not good for the body”. They gave no indication of how many times they change napkins.
Adolescent Girls: Dalit Community	Cloth	Girls discussed the menstrual hygiene practices of their mothers, which vary from using a cloth to a napkin. Mostly cloth is used as an absorbent.
	Napkin	Only one girl among the group has attained puberty. She uses sanitary napkins, changes them thrice daily, and buries the soiled ones.

Based on the above and relevant other information gathered, the following can be posited:

- ◆ Awareness level: Amongst Muslim women the awareness of alternate absorbents like sanitary napkins is low, unlike high awareness of sanitary napkins among Dalit women. Among village women (as mainly users of cloth) the awareness is lower than unit women (as mainly users of sanitary napkins) .
- ◆ Usage of cloth versus sanitary napkins: The use of cloth is predominant in the village except among women belonging to the unit. Interestingly, among Dalit women, 3 out of 6 respondents use sanitary napkins (As the unit workers are mainly women from the upper status/caste, acceptance of modern products, such as sanitary napkins, represents a desire for modernity and upward social mobility).
- ◆ Hygienic practices relative to napkins and cloth: For the majority of women the frequency of change of napkins is dependent more on physical discomfort related to heavy bleeding as opposed to the need to maintain hygiene. The women using cloth usually use it for an extended period of time i.e., several months at a stretch. The use of the same cloth unless fully sanitised is unhealthy and unhygienic and poses a considerable challenge to menstrual health. The washing and drying of the cloth used as an absorbent is another serious concern. Although drying the washed cloth in the sun is a common practice, many women feel reluctant to do so because they feel it is inappropriate for the men folk to see it. The lack of personal space for women raises the larger issue of it being a reflection of a male dominated society, wherein women’s need for privacy and a space of their own is ignored.

- ♦ Gap between knowledge and practice: Most women showed accurate knowledge about the correct menstrual hygiene practices (such as, how the cloth should be used, how it must be washed and dried, how often cloth or napkins should be changed etcetera). However, considerable disparity can be noted between theoretical knowledge and actual practice, with many well-informed women describing the practices they follow that clearly contradict what they know to be correct.
- ♦ Gap areas in knowledge: Adolescent girls and women alike noted that they found out about periods only after they attained menarche (See Table 1.3 for further details). Equally important, beyond basic menstrual hygiene, women’s knowledge of infections like RTIs, urinary tract infections (UTIs) was limited or non-existent. While able to enumerate symptoms of some infections, women showed little awareness of the specific diseases related to poor menstrual hygiene. Even when experiencing menstrual and reproductive health problems such as infections and painful periods, they were unaware that they need to visit doctors to address their problems.

Table 3: FGD Results: Knowledge of Menstruation

FGD	Knowledge of Menstruation
Dalit Women	Most women received information from their mother. Almost all women only learnt about Menarche after it had occurred. “You discuss about Menarche in the cities and not in the village. Something you get monthly, regularly on the same day”.
Muslim Women	Received information mainly from family members including mother, grandmother, aunt and elder sister. They were adamant the daughters should only be given information after menarche.
Village Women	Someone of them got scared when they first saw blood. One woman felt she was going to die. Informed by elder women and friends. Many were not taught at school.
Unit Women	4 out of 5 women were told by their mother about menstruation. One young member of the unit was given information at school. “It happens because you are a woman and so that you can give birth to a child.”
Adolescent Girls: High School	Informed by mother, sister, grandmother and friends. They are yet to receive information at school regarding menstruation. They were reluctant to give reasons for why menstruation occurs.
Adolescent Girls: Dalit Vasti	“It pains and we should eat healthy food” 2 out of the 8 girls attended a session at school where they showed a video. In another school 6 girls had come to give information. Those girls who had not attained puberty were yet to be informed by family members.

Table 4: FGD Results – Challenges to Menstrual Hygiene Practice

FGD	Challenges to Menstrual Hygiene Practice
Dalit Women	“When we are only getting Rs.100 per day for the household how can I spend Rs.20 on sanitary napkins?” Women keep delaying buying sanitary napkins, as they do not view them as a priority and deem them expensive. One woman washes the napkin after use because of a superstitious belief* and many women are concerned about how to dispose of the used napkins which discourages their use.
Muslim Women	They mention disposal as an issue regarding napkin use. They also refer to the costfactor as an economic barrier to purchasing napkins.
Village Women	Use a flannel cloth as ordinary cloths are uncomfortable.
Unit Women	All continue to come to work during menstruation. Most of the unit women wash the sanitary napkin and then burn it. However, one woman felt this (use and disposal of napkins) was not environmentally sound.
Adolescent Girls: High School	Girls mostly follow practices of mother and grandmother e.g. using cloth. They do not dry the absorbent cloth in the sun because people may see it. They are aware of superstitions** regarding napkins and are likely influenced by them.
Adolescent Girls: Dalit Community	They do not have an incinerator or other means of disposal at school which discourages them possibly from using napkins.

***Some women believe if a snake crosses over the used menstrual pad the woman becomes infertile.*

Based on the above and other sources used for the present study, the following can be inferred:

- ♦ Lack of decision-making power among women and adolescent girls: In most Indian homes, especially rural, it is the eldest in the family who makes the economic, social and political decisions. The women generally tend to lack any decision-making power and they have restricted, if any, access to resources. This is a challenge also for the Jeur women interviewed for this study. For adolescent girls in Jeur, likewise, the use of sanitary napkins or cloth is a decision the elder women in the family make on their behalf. Even though a girl at menarche may be grappling with the physiological and psychological changes in her body, she is offered little guidance or autonomy and it is definitely a struggle for her to make decisions for herself. The restriction on the physical mobility of women and girls which confines them to the home is disempowering and makes it difficult for them to take decisions or incur expenses on their own health and wellbeing.
- ♦ Less priority given to sanitary napkins: Along with economic dependence, which is a barrier to make informed choices for the use of the appropriate absorbent, women tend to place

less priority on purchasing sanitary napkins. Women noted how they procrastinate when it comes to buying napkins. For example, they put off buying pads until they have problematic periods suggesting that napkins are more convenient to use for a troublesome period.

- ◆ The difficulty with disposal of napkins: Disposal remains a huge barrier to the use of napkins. Women are uncomfortable with disposing napkins in open waste disposal areas. Currently, there is no waste collection and disposal infrastructure in rural areas that allows for discreet ways to dispose used napkins.
- ◆ Superstitious beliefs as barriers to use of napkins: The prevailing superstitions related to menstruation are an important factor limiting the use of napkins. The impurity or untouchability associated with menstrual state keeps women and girls away from seeking solutions to their menstrual problems or to obtain products that can make menstruation more manageable, and menstrual health more achievable. The washing of napkins before disposal reflects the association of menstruation with impurity. Such myths and misconceptions even about modern products such as sanitary napkins prevail across generations and hamper the ability of the woman to explore and adopt alternate methods and practices that promote menstrual hygiene.

(D) The impact of the Sanitary Napkin Unit on menstrual hygiene practices in Jeur

Table 5: FGD Results – Influence of Sanitary Napkin Unit

FGD	Influence of Sanitary Napkin Unit
Dalit Women	Almost all in this group of women were not aware of the unit in Jeur. Only one woman who is an ASHA worker had knowledge of the unit and advocated napkin use. The reason for lack of awareness as indicated by the women was: “We cannot step out of the house – so how will we know?”
Muslim Women	The women knew that the unit existed but were unable to give further information about its activities.
Village Women	One woman was aware of the unit as her colleague formerly worked at the unit.
Unit Women	All women working in the unit were in favour of using sanitary napkins and cited it as the preferred option. Further, they were all aware of correct hygiene practices.
Adolescent Girls: High School	They did not know about the unit. However, they were aware of the training centre (near their school) which is associated with the manufacture of sanitary napkins. The girls were aware of sanitary napkins and knew that napkins were linked to menstruation.

FGD	Influence of Sanitary Napkin Unit
Adolescent Girls: Dalit Community	They had heard of the Jeur unit and had encountered women (ASHA workers), who come to the hamlets to sell the sanitary napkins. They confirmed being advised by these women not to use cloth during menstruation.
Professionals	Most of the health professionals felt that the unit-produced napkins were cheaper than other brands, although one ASHA worker felt that the napkins were still too expensive. Several professionals mentioned that the more educated women were aware of the unit and used napkins. “Even if slightly literate, they use it.” One of them stated that the unit had helped women by giving them employment and increased hygiene awareness. According to an ASHA worker, “It (sanitary napkin) makes the women’s lives easier.”

In view of the above, the following conclusions can be drawn:

- ◆ The majority of the women present for the FGDs were not aware of the Sanitary Napkin Unit’s existence. Being confined to the home was cited as a reason for their lack of awareness. Those who were aware of the unit knew about it through their social network, specifically through a family member, friend or acquaintance who may have been working at the unit. Importantly, those who knew of the unit had a positive impression of it and they were happy to advocate for the use of napkins. They could also relate napkins to menstruation and to menstrual hygiene practices.
- ◆ Besides the health workers and professionals such as ASHA workers, LHVs, ANMs, and teachers interviewed for the study, it was only the unit women who had fairly good knowledge of menstrual hygiene practices.
- ◆ The difficulty with disposal and poor economics of sanitary napkins emerged as reasons for not using sanitary napkins.

(E) The level of knowledge among health care providers and other professionals and their role in generating good menstrual hygiene awareness

Table 6: Interview Results – Menstrual Health Knowledge and Hygiene Awareness

Professional	Menstrual Health Knowledge and Hygiene Awareness
LHV/ANM	Both the LHV and ANM had extensive knowledge of the causes of menstruation, (e.g. hormones and shedding of uterine lining), and correct hygiene practices. They were aware of the consequences of poor hygiene including RTIs and infertility. They had received formal training from the local hospital and at district level. They associated poor hygiene with cancer.
ASHA	They did not know why menstruation occurs. They gave correct information on cloth use e.g. wash it in hot water, dry it in sunlight etc. They advised disposing of the napkin in the drainage. They are aware that poor hygiene causes infection but were unable to specify what type of infection. They had received minimal training at the PHC.
Anganwadi	They were aware that periods are a monthly phenomenon and signify maturity. They had received health orientation training along with the ASHA workers. They were aware of good personal hygiene methods and correct use of the cloth. They were also aware that poor hygiene can cause infections but could not specify further. They cited disposal and cost as problems with the use of sanitary napkins.
Teachers	They were unable to explain reasons for menstruation and mentioned that only the biology teacher knows and teaches that topic. One of the teachers noted that menstrual blood is impure and must leave the body. They had not received any formal training on menstrual hygiene as teachers. They were aware of how to use the napkin and cloth in a hygienic manner. They were also aware of infections as a result of poor hygiene but could not specify which type. They mentioned cancer as a consequence of poor menstrual hygiene. They cited disposal as a difficulty for girls to use sanitary napkins and noted that they are awaiting the installation of an incinerator at the school. They also pointed out that many school girls do not attend school during menstruation.

In the light of the above, the following observations can be noted:

- ◆ Among healthcare workers, the ANM and the LHVs were well informed of the biological causes of menstruation. Their knowledge displayed appropriate training on the importance and maintenance of good practices of menstrual hygiene. However, other frontline workers (such as ASHA workers, teachers and *anganwadi* workers) did not seem to possess adequate knowledge. All healthcare professionals knew and could demonstrate the good practices of

cloth use. In respect of disposal they were less well-informed as seen in the advice given by one of them 'to throw the napkins in the drainage system'.

- ◆ While all healthcare workers were aware that poor menstrual hygiene can cause secondary infection, they were unable to specify which types of infection. Furthermore, they were neither aware of the severity of the consequences of poor menstrual hygiene nor did they appear to attribute much importance to it.
- ◆ The higher level of knowledge about menstruation and related issues among the LHVs and ANMs could be attributed to the good training they received unlike other healthcare workers who did not have access to such training.
- ◆ The responses of the healthcare workers reiterated cost and disposal as the barriers to the use of napkins.
- ◆ The majority of the professionals interviewed were acquainted with the unit and all those who knew of it viewed the unit positively. They mentioned several reasons for their favourable opinion including employment generation, awareness generation, and availability of affordable napkins. Strangely, ASHA workers who traditionally have the greatest access to women in the community showed the least awareness of the unit.

Lessons Learned

Relative to the sanitary napkin unit in Jeur (Objective 1)

Through critical analysis of the chronological process from conception to operation of the sanitary napkin enterprise in Jeur, the following four factors can be identified as the enablers to the unit's success. These will be valuable to keep in mind in any future venture.

- (i) The *leadership and entrepreneurial skills* of the founder(s) of an enterprise are critical to its successful beginning and subsequent development. This was clearly seen in Jeur, where a person from the village- Mr. P - played a major role in the start-up, functioning, and vision of the project.
- (ii) The *financial viability* of an enterprise is equally important. Unless the enterprise is *financially sustainable*, it cannot carry out its operations or fulfill its larger mission, in this case, of providing employment opportunities for women and promoting their wellbeing. For a social enterprise additionally, there is need to go beyond profit-making and balance its business with social and human development goals. The business plan should reflect and lead to such balancing.
- (iii) An enterprise such as the Jeur unit offers significant potential for *social impact* by serving as a catalyst for changed awareness and behaviour in respect of good menstrual hygiene, and as a vehicle for promoting social capital formation and female empowerment.
- (iv) Immense capacity exists within the community, as observed in Jeur, to mobilise resources for its growth, on its own, and with minimal external intervention. In Jeur, it was this *community support and participation* that attenuated the initial resistance to the unit, and it was the innovative independent effort by the community that drew wide attention (by the media, various echelons of Government, UNICEF and some NGOs) to the Jeur enterprise and its potential as a replicable model.

Relative to menstrual hygiene awareness and practices (Objective 2)

- (i) **Barriers to awareness:** Barring healthcare and other professionals, and women employed at the unit, almost all the women contacted in Jeur for the present study showed limited awareness and/or capacity to practise good menstrual health i.e., regular use and safe disposal of sanitary napkins. The prevailing cultural traditions, myths and superstitious beliefs about menstruation; inadequate training of frontline workers such as teachers and ASHA workers;

limited physical mobility, economic power and autonomy for women; and the low level of education among them were the key barriers to knowledge and practice of menstrual hygiene in Jeur. The affordability of sanitary napkins was another constraint which made their purchase and regular use a lesser priority. There was also some indication of an intrinsic tendency among women not to prioritise the purchase and regular use of sanitary napkins. The above barriers underline the significance of broader socio-economic, cultural and other fact the barriers, in order to promote the desired menstrual health knowledge and behaviour among women.

(ii) **Disposal:** Discreet and safe disposal of used sanitary napkins was a major constraint on usage. In Jeur, women repeatedly highlighted the unsatisfactory and scarce means currently available to them and the need to address or the disposal of sanitary napkins. In the absence of solid waste management system in the village, disposal becomes a challenge, in turn discouraging the use of sanitary napkins. The demand for discreet, safe disposal is an expression of women's desire for privacy and convenience, but it is compounded by the widely held notion in the community that menstrual blood is impure and menstruation a source of shame.

(iii) **Cost:** The affordability of sanitary napkins is a serious concern. While it could be argued that because purchase of sanitary napkins was an extremely low priority among Jeur women, they tended to present the high cost as a reason for not buying them, it is likely that more affordable pricing would generate increased purchase and usage, and would contribute to prioritisation of sanitary napkins among women.

In view of the above lessons, it can be surmised that the Jeur unit and any others that exist or are intended elsewhere, must take it upon themselves to address key barriers such as cultural beliefs, low awareness, economic issues and absence of solid waste management system. By helping to address and overcome the above constraints, the units can be instrumental in improving menstrual hygiene knowledge and practices in a given community - in Jeur or elsewhere. It is important that any intervention be economically, environmentally and culturally viable. Most important, the intervention should empower women to make their *own* sanitary choices.

The presence and impact of a Jeur-like enterprise should percolate beyond the product and production activities. It should aim at educating women about various methods of hygienic use and disposal of cloth along with working on removing the barriers to promote use of sanitary napkins.

Learning from and applying the lessons culled from Jeur, other sanitary napkin enterprises as well as the one in Jeur will be able to become more socially relevant and sustainable. Economic viability is of course critical to an enterprise for which efficient manufacturing, effective

distribution, and aggressive marketing to reach a larger market base are prerequisites. For social capital formation additionally, women's empowerment through employment and managerial opportunity with the unit(s) must be accompanied by the unit's commitment to using its presence in a community to become an ongoing vehicle to spread menstrual hygiene awareness and practice therein.

Next Steps

Relative to the Unit (Objective 1)

The **leadership and business development skills** demonstrated throughout by the entrepreneur (Mr. P) in Jeur was the key factor contributing to the inception, development, and success of the enterprise. To replicate it elsewhere, it would be necessary to identify such an individual, which may not always be feasible. However, it is likely that within a group such as an SHG/ women's group, such skills can be found and/or nurtured.

There is a role for an **NGO or a development agency** such as UNICEF to support in the above process and offer advantageous inputs. Firstly, at the point of start up the agency can aid with loan procurement and formulating a business development plan to aid economic viability. Secondly, it can train the staff or SHG members in accounting and documentation. Thirdly, it can engage formally or informally in monitoring and promoting SHG activities. This may include encouraging regular meetings, strengthening support mechanisms, e.g. emergency loans, and facilitating networking between the SHG and other stakeholders.

It is recommended that the enterprises connect with **local media** networks for more overt marketing strategies after the establishment phase. Overtime, by creating an increased demand for napkins through effective marketing, a market for locally produced raw materials e.g., wood pulp may arise. In turn this would help to **reduce cost of production**. Further, it would be useful if the enterprise utilises the personal networks of its members to create distribution chains locally. Those who are marketing the product must be open to targeting women from all social and economical groups.

Through **awareness generation programmes**, the NGO or agency supporting the SHG could sensitise women as well as marketing personnel to issues of caste, religion and economic status, emphasising also the value of community cohesion and active participation. This would be beneficial both to the SHG and the community at large. Additionally, marketing and economic viability will be greatly improved with an increase in menstrual hygiene awareness and greater demand for the product from the local community (which is the focus of Objective 2).

Various modifications must be considered to allow for continuous and efficient production. This includes moving from electric generators to solar panels to tackle cuts in power. Identifying locally produced raw materials (as is recently being done in Jeur) and placing orders in advance of probable shortages will help to avoid unwanted halts in production.

Relative to improved menstrual health awareness and practices (Objective 2)

The next steps recommended below are targeted to each of the barriers to the practice of good menstrual hygiene delineated earlier.

Awareness

Awareness generation efforts should be directed at two distinct groups:

(i) Educating the Community:

The Jeur unit has the infrastructure and trained personnel who can be utilised to develop a menstrual hygiene awareness generation scheme. The health care professionals at the PHC can support the women of the unit with the required information on menstrual hygiene. The modes of generating awareness may include issue based street plays, which is an informal and culturally appropriate method for disseminating sensitive information. Further, ASHA and anganwadi workers, along with women working at the unit, can mobilise women of the village and encourage them to attend community meetings where reproductive health issues such as menstrual hygiene can be discussed and women can benefit from peer learning. The development of indigenous behaviour change communication (BCC) materials, (previously known as information education communication or IEC), which address in a culturally sensitive way the existing beliefs, rituals, myths and misconceptions related to menstrual hygiene can be an effective method of communication. Efforts should also seek to strengthen the content of existing schemes meant for adolescent girls on issues of menstrual health, hygiene and sex education.

(ii) Educating the healthcare personnel, and sensitising and training the frontline professionals:

There is a need to enhance the quality and content of training for frontline workers such as *anganwadi* and ASHA workers who have daily access to women in the community. This will allow them to deliver accurate information to women and tackle their common concerns. By reassessing and improving the content of existing training schemes to incorporate more extensive information on menstrual health, and designing and conducting regular refresher courses, it will be possible to close the existing gap in menstrual health knowledge among professionals and frontline workers. It would be useful if the women from the unit and health care workers at the PHC can be involved.

Disposal

It is important to work with the community and the village governing body, the Gram Panchayat, to address the issue of solid waste management, and together, identify areas for safe and discreet disposal. A possible solution may be to utilise existing institutional incinerators (at the PHC and the School premises) for waste disposal including for disposal of napkins. The community needs to be motivated and supported to take responsibility for and work towards a centralised solid waste management system in which sanitary waste may be integrated.

The unit and PHC staff can collaborate to teach about safe disposal in parallel with menstrual hygiene awareness generation. The women engaged in marketing sanitary napkins may be particularly suited to this role. The above may be of benefit to the unit, as it will also help to generate awareness of sanitary napkins and stimulate their sale in the village.

In the long term, it would be desirable to investigate alternative and innovative methods for disposal. This may include selecting raw materials to make biodegradable napkins or the use of specially bred worms that may digest the used napkins in an environmentally sound manner. These are some options that are currently in use or being tested elsewhere.¹⁴

Cost

To manage costs and make product pricing competitive as well as affordable, the unit (Jeur or other) must devise a business development plan and profitability model, which aims at cutting down the cost of production and improving efficiency. In the less well-off rural households especially, where the choice often is between critical survival needs and broader expenditure heads, the importance of affordability and ease of access to purchasing and disposing sanitary napkins cannot be overstated.

Seeking to change the popular mindset regarding menstrual hygiene and menstruation, this report can conclude on a different if poetic note by citing the following tribute in celebration of women:

“In man, the shedding of blood is always associated with injury, disease, or death. Only the female half of humanity was seen to have the magical ability to bleed profusely and still rise phoenix-like each month from the gore.”

- Estelle R. Ramey

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Annexure I

Questionnaire for focus group discussions

Name:

Age:

Educational qualification:

Duration of employment:

Salary:

Marital Status:

Occupation of husband:

Caste:

Hygiene

- 1) Do you do anything different when you get your period?
- 2) What do you use for menstrual hygiene? (Cloth/Napkins)
 - Tell us how you use the cloth
 - Tell us how you use the napkin

Symptoms

- 3) Anything you look out for on your period?
- 4) What problems can happen if you are not clean with the period?

Awareness

- 5) When did you start your periods? Were you aware of what periods are when you got them?
- 6) Are you aware of the changes that occur in your body when you get your periods? What happens to your body when you get your period?
- 7) When did you learn about the availability of sanitary napkins?
- 8) If sanitary napkins were available at the sanitary napkin unit would you buy?
- 9) If the sanitary napkin was not available at the unit would you buy from the medical store? From the general store? From the ASHA worker?
- 10) If you had to choose between Rs 22 sanitary napkin and soap what would you choose? And sanitary napkin vs. shampoo or 'fair and lovely' cream?
- 11) What types of sanitary napkins do you know about?

Disposal

- 12) How do you dispose of used sanitary napkins or cloths pads?
- 13) What kind of rituals did you follow during the periods?

Empowerment

- 14) Do you cook food when you have menstruation?
- 15) How will you orient your child towards menstruation and hygiene?
- 16) Do you go to the village on your own? Do you participate in decision making at your home?

Questions to be asked to the adolescent girls:

- 17) Are there girl's toilets in the school? Is there water facility in school toilets?
- 18) Do you miss school during periods?

Annexure II

Composition of focus groups (FGD)

Dalit Women

17 women attended the FGD. They were mobilised by an ASHA worker who belonged to the community and the local PHC. 6 were under 35 years old and the remaining were over 40 years old. However, it was the 6 younger women who contributed to the bulk of the discussion.

Village Women

These women were mobilised by an anganwadi worker who had previously worked at the Nirmal Sanitary Napkin Unit.

NO.	Age	Other details
1	60	Farmer. Married. 1 Child. Husband retired from Military. Lingayat Caste. (Hindu)
2	25	Homemaker. Married. Studied until 5 th Standard. 2 Children. Gaurav Caste. (Hindu)
3	18	Studied until 12 th . Currently an MS student,
4	40	Married. 2 Children. Husband is a construction worker.
5	-	Primary education only.
6	-	Studied until 10 th Standard.
7	-	Married. Anganwadi worker, Husband is a farmer. Gaurav Caste. (Hindu)
8	35	Married. 2 children. Husband works in a photo store.

Muslim Women

These women were mobilised by the teachers at the Urdu School located in Jeur Village.

NO.	Age	Other details
1	-	Married, 3 children, Husband works in the field
2	-	Married, no children, Studied until 11 th Standard. Husband works in the field.
3	24	Unmarried. Does not work – stays at home.
4	32	Married, 4 children. Studied until 4 th Standard. Husband is tailor.
5	32	Married. Studied until 7 th Standard, Husband works in the field.
6	30	Married. 4 children and expecting 5 th . Husband works at the mill.
7	25	Married. Studied until 1 st standard. Husband works at the mill.
8	-	Married. 4 Children. Studied until 4 th Standard. Husband works in th field.
9	17	Unmarried. Employed with stitiching work.

10	24	Married. 3 children. Husband is a driver.
11	25	Married. 4 children. Husband works abroad.
12	30	Married. 4 children. Husband is a tailor.
13	32	Married. 4 children. Husband is a driver.
14	30	Married. 3 children. Husband works in the field.
15		Married. 5 children. Husband works in Rajkot.

Unit Women

2 FGDs were held at the Nirmal Sanitary Napkin Unit and more FGDs were not feasible due to time constraints of the women working at the unit.

No.	Age	Other
1	25	Unmarried. Studied until 1.2 th Standard
2	23	Unmarried. Studying for Diploma in education. Lingayat Caste (Hindu)
3	21	Unmarried. Studying for BA. Lingayat Caste (Hindu)
4	16	Unmarried. Studied until 10 th Standard
5	22	Married. 2 Children. Lingayat Caste. (Hindu)
6	18	Unmarried. Studied until 12 th Standard. Working in unit for 1 month.

Adolescent Girls at Dalit Vasti

9 girls attended. All were in 6th -10th Standard. Only one had attained menarche.

Adolescent Girls at High School

10 girls were selected for the FGD from a group of 100. All were in 8th – 10th Standard and attended the government high school in Jeur. Only one girl had not attained menarche.

Annexure III

Questionnaire for health care workers and other professionals

Name:

Salary:

Age:

Marital Status:

Educational qualification:

Occupation of husband:

Duration of employment:

Caste:

1. Are you familiar with the Sanitary Napkin Unit in Jeur? How did you know about the centre?
2. What do you think about the unit?
3. Do you think it has affected the practices in Jeur? How?
4. What do you know about menstrual health?
5. What form of instruction did you have about menstrual health?
6. Can you tell me why women have periods?
7. What are some important things to teach about menstrual hygiene?
8. What are some of the concerns with poor menstrual hygiene? What are the side effects of poor menstrual hygiene?
9. Do you know the name of any disorders?
10. Do you tell women about these side effects? How have you made people aware about menstrual hygiene and disposal?
11. Do women visit you to discuss about their menstrual problems?
12. Women from which part of the village visit the most?
13. Do you think women have awareness about the menstrual hygiene in the village? If yes then what is the reason behind it?
14. What are the remedies or counselling which you provide to women who approach you with menstrual issues?
15. If you suspect a problem where do you advise the woman to seek help?
16. How difficult is it to get help?
17. Do you think the sanitary napkin is better option for women during the menstruation?
18. What are the different methods for disposal of sanitary napkin?

Annexure IV

Other government schemes that facilitated the Jeur project

- ♦ **Total Sanitation Campaign (TSC)** – Established in 1999 by the Department of Water Supply and Sanitation, this is a comprehensive programme to ensure sanitation facilities in rural India.¹²
- ♦ **National Rural Health Mission (NRHM)**–Covering the period 2006-2012, this is a government scheme that aims at providing valuable healthcare services to rural households all over the country.¹³
- ♦ **Swarna Jayanti Gramin Swarojgar Yojana (SGSY)** – Launched in 1999, this is an integrated programme for self-employment of the rural poor through small enterprises or financed through self-help groups.¹⁴
- ♦ **Rajiv Gandhi Scheme for the Empowerment of Adolescent Girls (SABLA)** - Announced in 2009, and awaiting implementation, this aims to be a health scheme catered to the needs of adolescent girls.¹⁵ This includes **Kishori Diwas**, a programme conducted once every three months by the Primary Health Centre (PHC) in collaboration with schools where girls have a health check and are offered de-worming treatment.

Annexure V

Investment, production cost & revenue of Jeur enterprise

Table E.1 Initial Monetary Investment in and Other Financial Support given to Jeur Enterprise

Contributor	Amount
Jalswarajya Project	2.5 lakhs
Local Entrepreneurs	4 lakhs
SHG (Jeevan Jyoti)	50,000 rupees
Bank of India SGSY Scheme	25 lakhs (including 9 lakhs (36%) subsidy)
Bank of India Current Credit	5,50,000 rupees
TOTAL INVESTMENT	37.5 lakhs

Table E.2 Key Players in the Development of the Sanitary Napkin Enterprise of Jeur

Stakeholder	Major Role
Local Entrepreneur	Played major role in founding, developing, and executing the daily production of the unit
SHG and Unit Members	Provided the human resources for initial investment, production, and marketing of the product
Gender Specialists, Jalswarajya Project	Provided SHG training, monetary investment, and support to the unit
Bank of India	Provided initial loan in the name of the SHG
Sakshi NGO	Provided the framework and original product/production knowledge
DWCD	Ordered sanitary napkins from the unit to provide these at a subsidised rate to rural adolescents
UNICEF	Provided training and technical support to the unit, networking at different levels along with advocacy

Table E.3 Cost of Production at Jeur Sanitary Unit

Initial Start Up Costs	Unit Cost in Rs	Quantity Required	Total in Rs
Machines			
Grinder	19,500	2	39000
Press Machine	28,000	2	56000
Sealing Machine	28,000	2	56000
Sterilization Machine	10,400	1	10,400
Air Compressor	18,000	2	36,000
Core Dye	1975	2	3950
Delivery Machine Kit	17500	1	17500
Total Cost of Machines			218850
Transportation of Machine	25,000-30,000	—	30,000
Initial Repair of Building			1,20,000
Total Initial Costs			3,68,850
Fixed Costs	Price (Rs.) per unit	Quantity	Amount in Rupees
Building Rent			250/month
Electricity			1000/month
Water			432/month
Supervisor Salary			1800/month
Total Fixed Costs			3482/month
Variable Costs*			
Raw Material			
Wood Pulp	51 per kg	300kg	15,300
Gelatin Paper	220 per kg	10kg	2,200
Non Woven Fabric	1.48 per meter	5000 Meters	7400
Release Paper	950 per paper	2	1900
Wrapper/Package	130 per kg	70kg	9100
Super Brand Gum	140 per kg	20kg	2800
Total Raw Material Cost			38,700
Labour			
Non SHG members	1500	10	15000/month
SHG members	1800	4	7200/month
Marketing	2000	2	4000/month
Total Labour Cost			26200/month
Maintenance			1000/month
Transportation			25000-30,000/year by Railway and bus
Marketing and Miscellaneous			50,000 **
Total Variable Costs			1,45,900
Total Costs (FC+VC)			1,49,382

*Variable costs derived from an interview with the entrepreneur and crosschecked with records. These refer to one-off payments. There are no records of the raw materials used to produce a specified quantity of product. Therefore the cost per month cannot be calculated accurately.

** Refers to payments made for gifts, social activities for employees and transport for marketing staff.

This figure was missing in the documentation but was cited in an interview with the entrepreneur.

Table E.4 Average Daily and Monthly Production and Capacity

	Daily Production	Monthly Production
Average Production (with electricity shortage)	75 packets	2,250 packets*
Maximum Production Capacity (without electricity shortage)	140 packets	4,200 packets*

*These rates are estimated with 10 to 14 Unit workers working 8 hours per day

Table E.5 Estimated Monthly Revenue per Packet Sold

Price	Amount in Rupees
Estimated Cost of Production per Packet	12.20*
Commercial Price per Packet	30
Revenue Generated per Packet Sold	17.80
Estimated Total Monthly Revenue*	12,015

* Interviews with key players revealed this figure. There was insufficient data to calculate this by other means.

**Revenue calculated based on estimated 30 per cent of production (675 packets) sold per month, at commercial rate of Rs. 30 per packet.

Annexure VI

A chronological timeline of the development of the sanitary napkin unit of Jeur

DATE	EVENT
Feb 2004	23 Districts in Maharashtra served under the Jalswarajya Project
July 2005	Entrepreneur connects with Gender Cell of Jalswarajya Project
September-October 2005	Entrepreneur and SHG members visit existing Sanitary Napkin Unit in Tamil Nadu
December 2005- January 2006	Jalswarajya Training of 15 SHGs (including Sanitary Napkin unit) takes place in Akkalkot
October 2008	Initial planning and monetary savings of SHG members, headed by main entrepreneur
October 8, 2008	Sanitary Napkin Enterprise is founded; Production begins at the Sanitary Napkin Unit
March 2009	Sanitary Napkin Unit Registered as a company
January 2009	Community Celebration of the grand opening of the Sanitary Napkin Enterprise
January 2009	Staff members begin to market sanitary napkin product to local households on a regular basis
February 2009	Staff members carry out community survey
February 2009	Enterprise receives media coverage (local newspaper, feature on Doordarshan and Star news)
November 2009	Compressor machine invented to replace pedal machine; Entrepreneur invests in purchase of 16 machines
November 2009	UNICEF begins involvement, including training of SHG members
March 2010	BIS Standard Certification passed
March 2010	SHG receives bank loan of 25 lakhs under SGSY
June 2010	Sample of product given to Indian Institute of Technology in Mumbai to improve size, shape, and functionality
October 2010	Production of post partum pads begins
February 2011	Sakshi, a Non-Governmental Organisation (NGO) begins involvement
March 2011	Women on Wings (Netherlands NGO) holds marketing training
March 2011	Unit makes deal with PHC to provide post partum pads
March 2011	Enterprise receives orders from DWCD.

Annexure VII

Example of red flannel cloth used as a menstrual absorbent.



Background Note on Internship Programme

Knowledge Community on Children in India (KCCI) initiative aims to enhance knowledge management and sharing on policies and programmes related to children in India. Conceived as part of KCCI, the objectives of the 2011 Summer Internship Programme were to give young graduate students from across the world the opportunity to gain field-level experience of and exposure to the challenges and issues facing development work in India today.

UNICEF India hosted 40 young interns from Australia, Canada, Colombia, Germany, Greece, India, Korea, United Kingdom and United States of America to participate in the 2011 Summer Internship Programme. Interns were grouped into teams of four or five and placed in 10 different research institutions across 8 states (Andhra Pradesh, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, New Delhi and Orissa) studying field-level interventions for children from 25 May to 3 August 2011.

Under the supervision of partner research institutions, the interns conducted a combination of desk research and fieldwork, the end result of which were 11 documentations around best practices and lessons learnt aimed at promoting the rights of children and their development. The case studies cover key sectors linked to children and development in India, and address important policy issues for children in the country few being primary education, reproductive child health, empowerment of adolescent girls and water and sanitation.

Another unique feature of this programme was the composition of the research teams comprising interns with mutlidisciplinary academic skills and multicultural backgrounds. Teams were encouraged to pool their skills and knowledge prior to the fieldwork period and devise a work-plan that allowed each team member an equal role in developing the case study. Group work and cooperation were key elements in the production of outputs, and all of this is evident in the interesting and mutlifaceted narratives presented by these case studies on development in India.

The 2011 KCCI Summer Internship Programme culminated in a final workshop, at which all teams of interns presented their case studies for a discussion on broader issues relating to improvements in service delivery for every child in the country. This series of documentations aims to disseminate this research to a wider audience and to provide valuable contributions to KCCI's overall knowledge base.