



Project - II

Menstrual Kit for Rural and Slum Sector

Project Guide
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Why the topic- Menstruation

- Serious issue
- Social mishap
- Ignored area of work
- Women related
- An environmental concern

Girls talk about it all the time- Sharing good- bad, the jokes , the tensions
Periods is one popular topic and so are the issues related to it.



Introduction

Menstruation

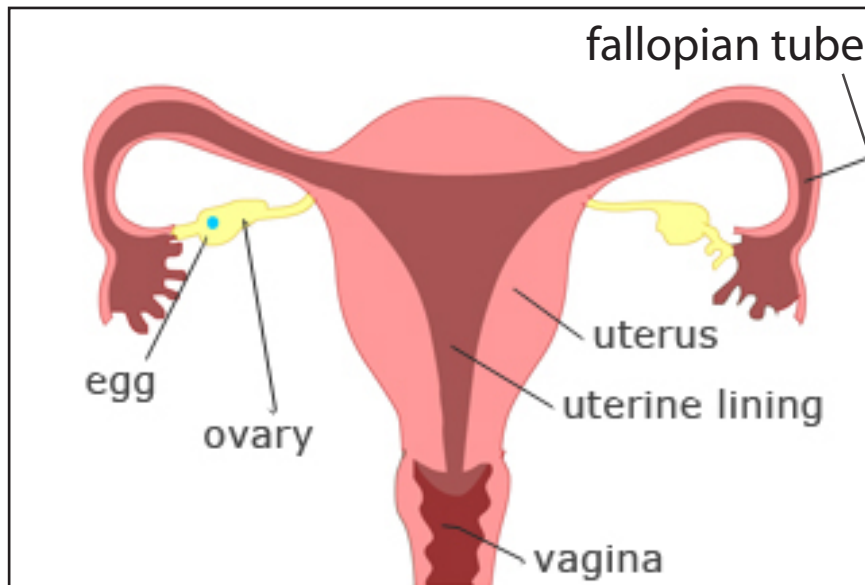


Fig 1 : Diagram of Uterus
<http://www.healthofchildren.com>

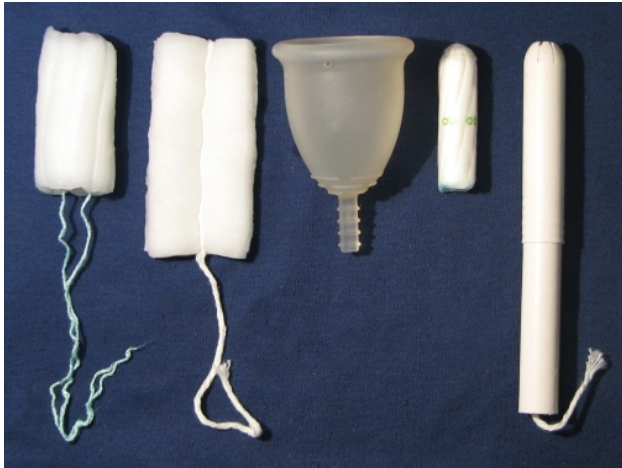
- Cyclic and physiological discharge through Vagina
- Discharge -blood and Muscosal tissues
- Recurs approximately 4 week interval
- On an average 3000 menstrual days in a lifetime

Menstrual Protection

Three categories of Products for Menstrual Protection:

1. **Internal protection**- Tampons, Menstrual cup
2. **External Protection**- Sanitary Napkins
3. **Semi Internal** (at concept level)

The idea of using anything internal is unacceptable to Indian Women.



Internal Protection

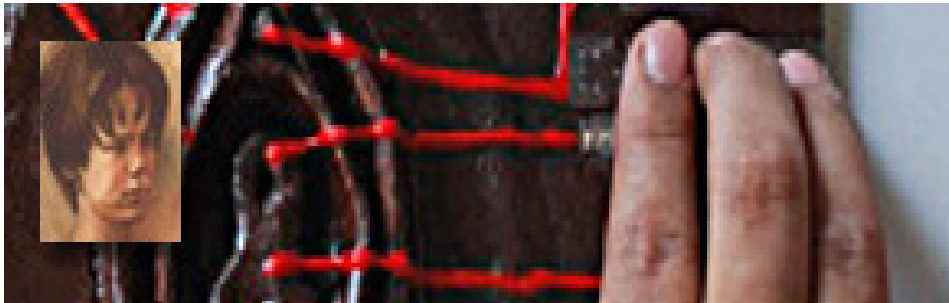


External Protection

Other Products Related to Menstruation



Sanitary Belt



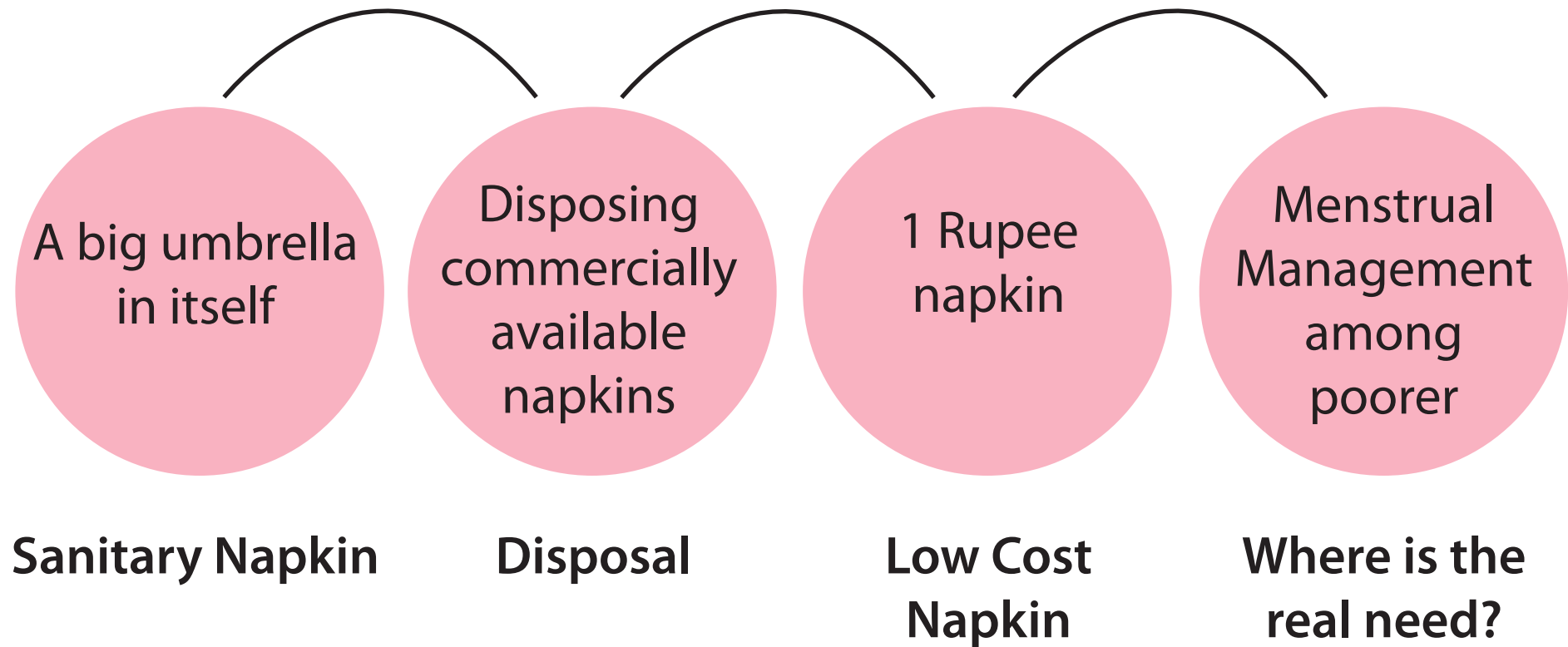
Kit to explain Menstruation to blind



Disposal Bag

Need Area

To start with the problem seemed simple-
'Redesign the sanitary napkins'





Research and Studies

1. Vatsalya foundation
2. Goonj organisation
3. Meeting Dr. Abhayankar
4. Women I know
5. Lakshmymurthy's project
6. Gynaecologist

Vatsalya Foundation

Nursing School For women from slum and village

“ I have four girls in my family.
It is too expensive to think of
sanitary napkins for all of us.”

A girl from Vatsalya

Monitory - Affordability issue

Social - Superstitions, Mindset

Comfort- Size, disposing issues

Usability- Fixing issues

Hygiene- Washing , storage

Disposal- Where and How

Goonj Organisation

Sanitary Napkin Project- 'Not just a piece of Cloth'



Sanitary Napkin made at Goonj

Understanding the User Environment

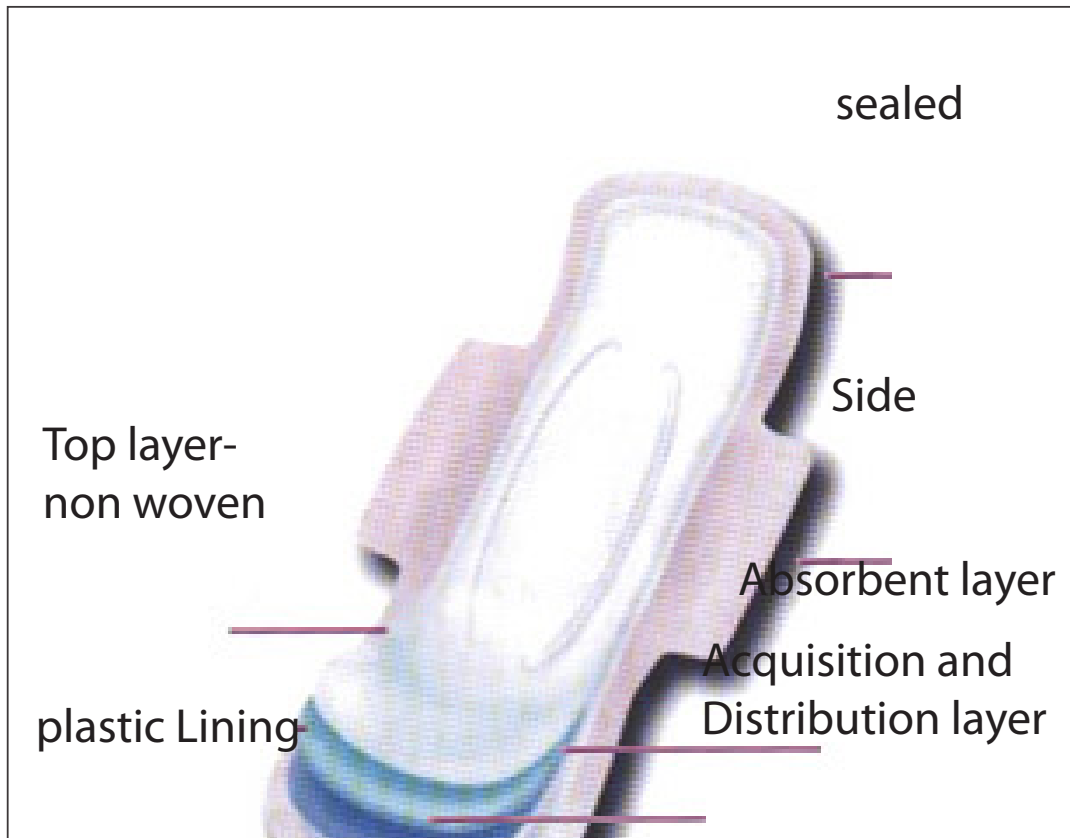
Structure of project- Making, packing, reaching the end user

Why cloth?-why not low cost napkin?

Environment- Reusable, Disposable

Meeting the Expert- Dr. Abhayankar

'Understanding the Product Sanitary Napkin'



Cost of Napkin- Absorbency, Size, Shape, Channelling

Construction of a pad- Layers and Functioning

Design Features in a Pad- Side wings, Channels, side walls

Understanding the user- Urban and Rural Scenario

Environment- Degradable layers

Women I Know

Talking about Menstruation and understanding various aspects

How much does being educated of a person matter ? "I don't enter my house kitchen during my periods, I am aware that it is non sense but its an unavoidable custom".

xyz,student IITB

Usability- Comfort

Awareness - New products, Environment

Attitude - Does education matter

Mrs Lakshymurthy's Project

Understanding the scenario

"Disposing of sanitary napkin is the biggest concern."

Mrs. Lakshymurthy

Similar Project

Understanding the Community

Biggest issue- Disposing

Meeting Gynaecologist

The health Side

On an Average the bleeding shouldn't be more than 6-8 ml. in a day.

Causes for rashes

How to maintain hygiene

Other aspects- Amount of bleeding, menstruation during menopause, after pregnancy

Net Study

Projects dealing with menstruation and Menstrual health

"Girls as well as women in developing nations cannot afford off the shelf sanitary Napkins."

Path Foundation

The purse project- Washable pad, Africa

Jani sanitary napkin- Pads made of water hyacinth, Africa

1 Rupee sanitary napkin- Low cost Disposable Sanitary Napkin

Breaking the silence project- Sanitation and Menstruation, Bangladesh.



Inferences

Using that clean, white,
well designed and no
fuss napkin is all we
need. This is what every
women should use.

isn't it?

70% of women in
India still can't afford
Disposable sanitary
napkin.

Designing for the focus group

Priorities and needs

Acceptability

Affordability

Availability

Usability

Different Alternatives

Environment

Periods is still a subject of shame, an uncomfortable topic. Efforts are taken in all direction to improve the situation. Acceptability is the first agenda.

You might provide incinerators but
***it's crazy to expect women in a
village to go and put the pad by
themselves in the incinerators.***

A staff from Goonj

Washable v/s Disposable

Which will work better for the concerned Sector

Good feature- comes at a cost

Disposal- Where and How?

Easy Availability of cloth

Environment- What is better?

Considering the above factors - *Further work was done on washable Options*

Possible Interventions

A combination Product

Redesign of Washable pad

Belted Napkin

Intervention in the Goonj
Sanitary Napkin

*The final product might be a combination of two or all of these.
It should satisfy the requirement of absorbency, hygiene, usability.*



Explorations and Ideations

Study Based on

Material

Product Analogies

Different Researches and Products



Sponges



Kitchen cleaning Materi-



Children nappies



Antimicrobial Fibre



Low cost Napkin

Keywords - Designing a Napkin

The main aim of a sanitary napkin is to absorb and retain menstrual flow.

A good sanitary napkin will also consider hygiene, usability and workability.

Absorption

Disposing

Hygiene

Washing

Drying

Storing

Wearing

Fixing

Removing

Odor/smell

Leaking

Ergonomics

Carrying

Adjusting

Packing

Flexibility

Size of the pad

Handling different activities

Rashes

Wetness

Body types

Channeling

Stretchable

Design Features in a Disposable Pad

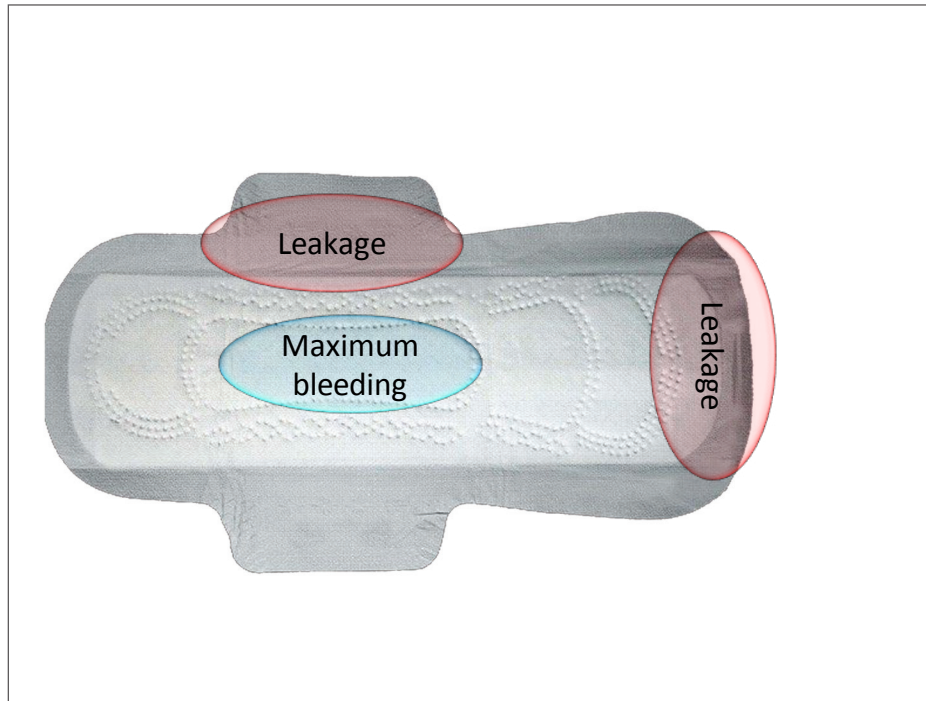


Fig 18: Leakage and maximum bleeding points in a pad

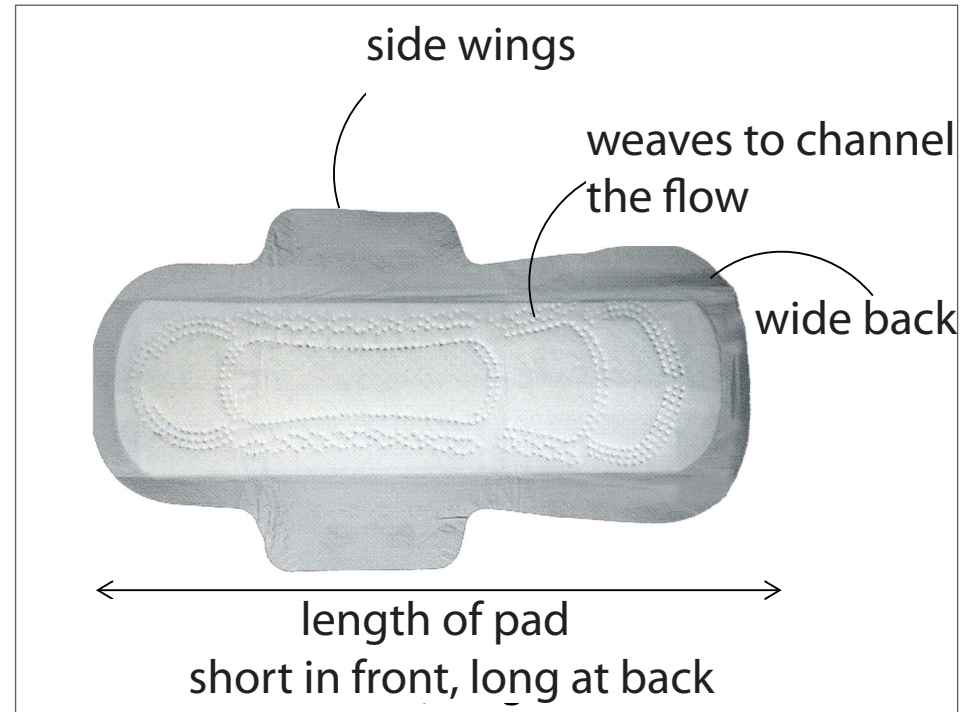
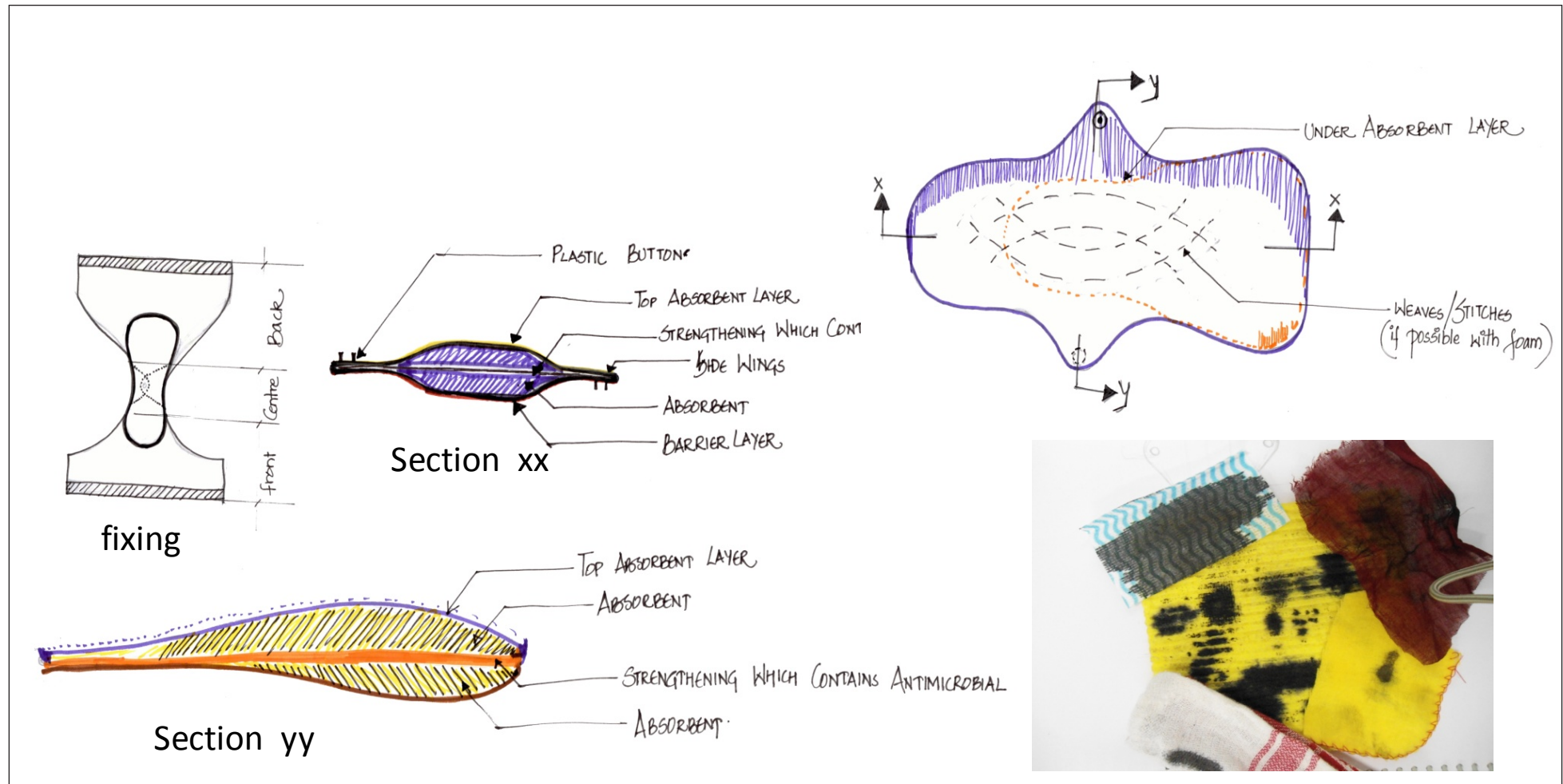


Fig 19: Design Features in a disposable napkin

Taking the design features of a disposable napkin and incorporating as much possible into the washable options

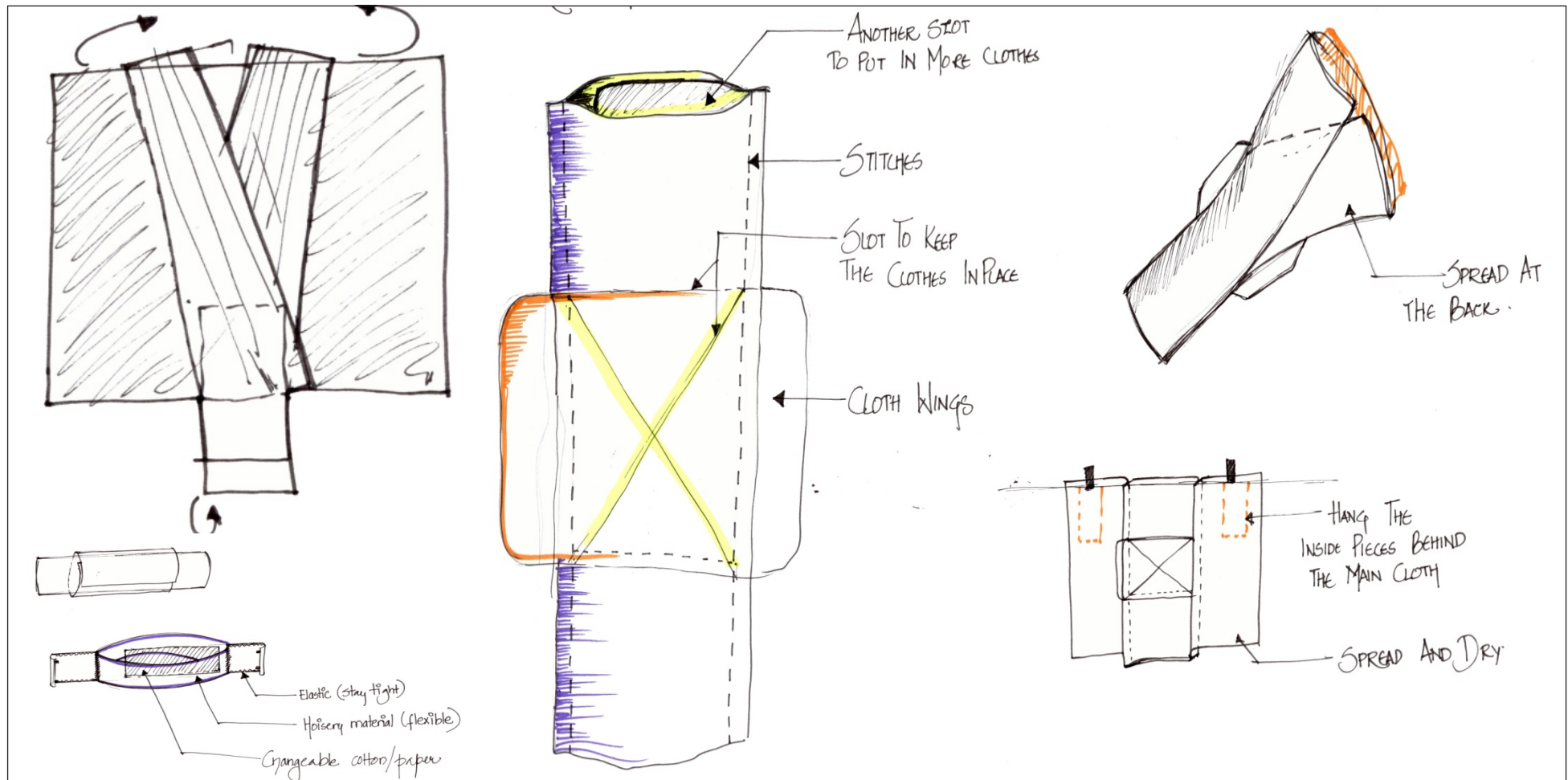
Modification in Washable pads

Thick Centre . Wider back. Soft Wall around. Stitches for Channeling



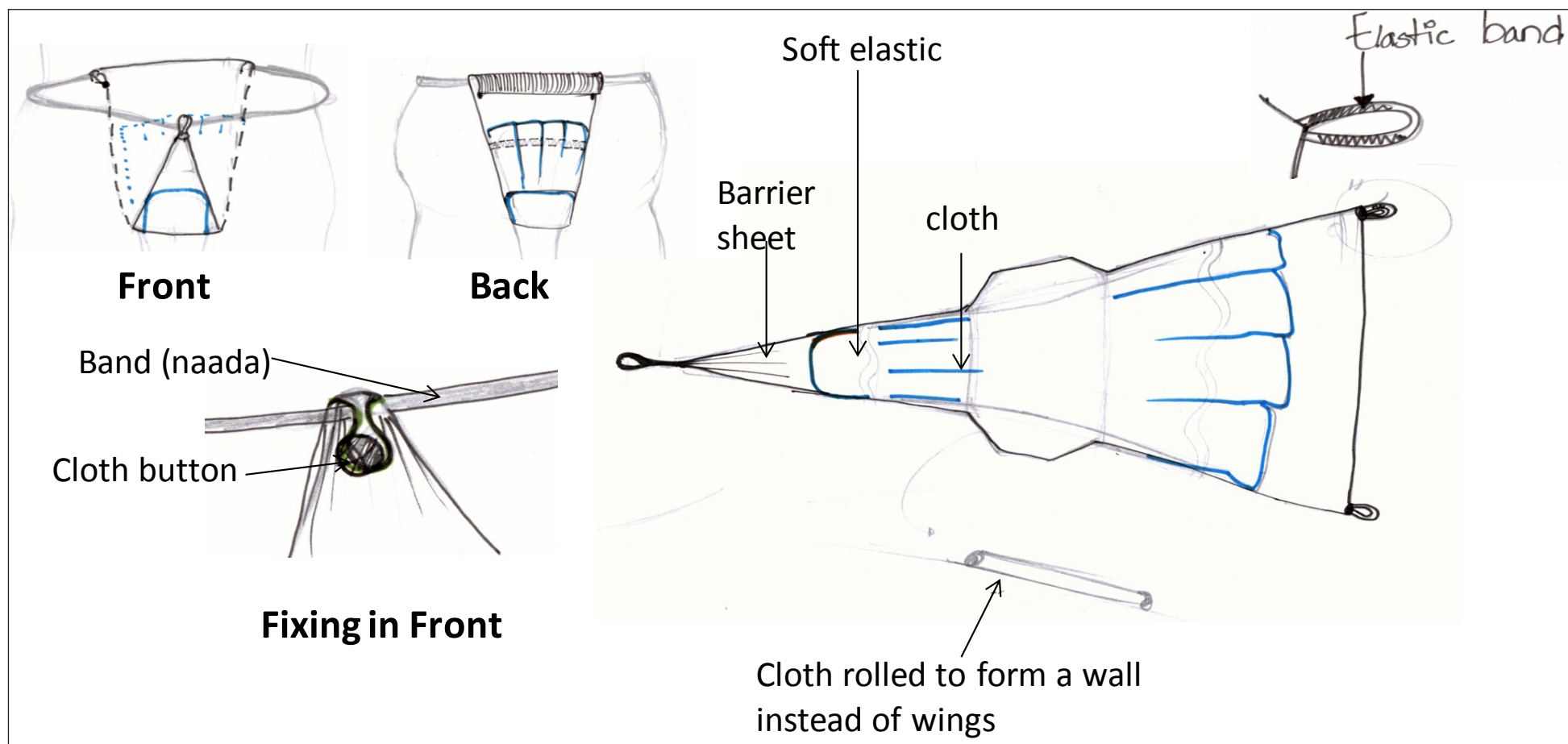
Improvising the Goonj Style Pads

Providing pockets and pouches to keep the cloth in place and organised



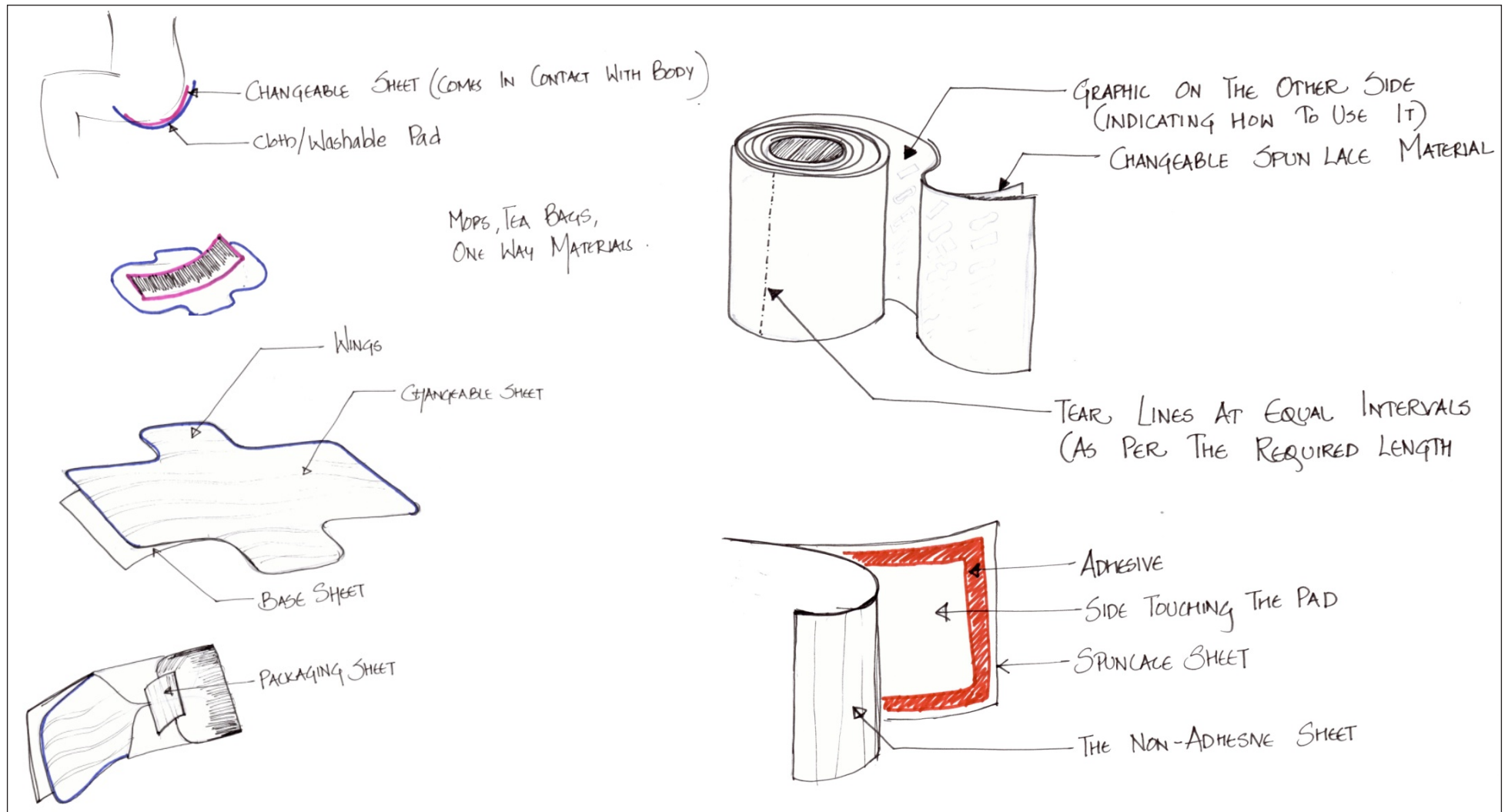
Barrier Sheet and Belted Napkin

For women who don't wear undergarment



Top Disposable Layer

To avoid direct contact of washable layer from the skin



Cloth Folds

An experiment to fold a square piece of cloth to make an effective pad





Final Concept

Cloth Folds to make an effective pad

Why a single piece of cloth?

The mentioned exercise will be done using a *square piece of cloth* of 60 cm side which will provide the mentioned benefits

1. Easy to wash
2. Dry faster
3. Convenient to dry
4. Flexible
5. Easy to maintain
6. Biodegradable

Cloth Fold - Wide at Back

Wide back for comfort and avoiding leakages



option 1



option 2



option 3



option 4

Cloth Fold - Wide at Back and Channeling

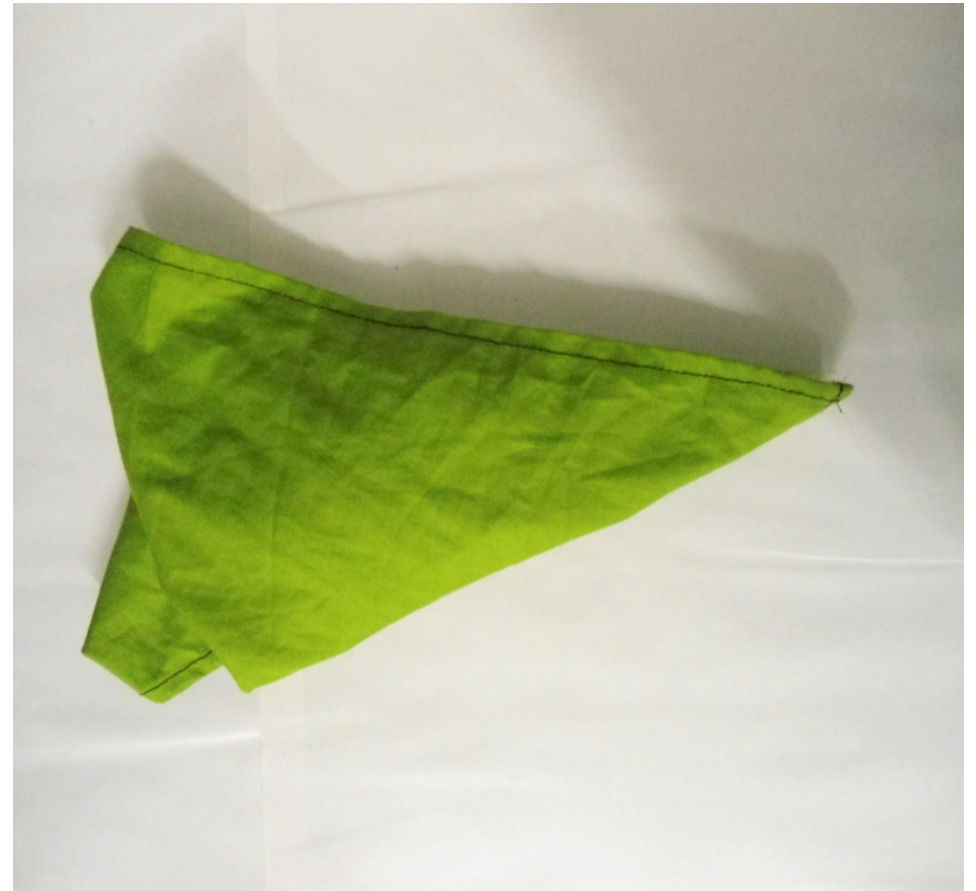
Channelling helps in directing the flow inside the pad



option 1



option 2



option 3

Cloth fold : With thick Centre



option 1



option 2



option 3

Cloth fold : With wings and Belted napkin



option 1: With wings



option 1 : Belted Napkin

Final Folding

Decided on the basis of

Ease of Understanding

Simple and neat

Comfortable and not rough on skin

Should be workable

Flexible

Option for Adding Material





Simple three folds



Channelling



Can be folded on either side to avoid confusion



Flexibility of adding material.



Keep the pleats below the first layer to avoid discomfort.



Final Product Brief

*To design a menstrual protection kit for the women in **slum or rural areas** who use reusable/washable options because of unavoidable reasons like **affordability, social factors ,comfort, disposing issues and environment.***

Content of the Menstrual Kit

1. Six square pieces of size 60cm X 60cm of printed cotton cloth
2. Instruction sheet
3. Two Barrier layers
4. Carrying Pouch/purse
5. Disposable Top layer (Phase 2 of the project)

All packed in an interesting Packaging

Cloth



Folded pieces of cloth

Square of size 60 cm.

Can be made by
joining smaller pieces.

Preferably Cotton and Printed

Easy washing, drying, folding

Can be folded and kept back
in packaging

Barrier Sheet



Cloth fixed in a barrier sheet

For **fixing Pad** to Underwear

Shaped like a disposable napkin
for better fit

Provision for
holding the cloth in place

Use of different **materials**

Use of different **fixtures**



1. Thick materials, economical



2. Plastic lining barrier sheet, tying



3. Parachute material + cotton, touch buttons to fix





Material , fixtures, best shape

Barrier Sheet construction





Folded pad in a barrier sheet

Top Disposable Layer



Helps in maintaining hygiene

Commercially available material

Roll form, dot cuts at equal intervals

Can be spun lace or spun bonded polypropylene material

Small size- easy to dispose

Thin spray of pressure sensitive hot melt adhesive

Carrying Pouch

Two pockets- soiled and clean cloth



Convenient to carry while travelling



Carrying Pouch

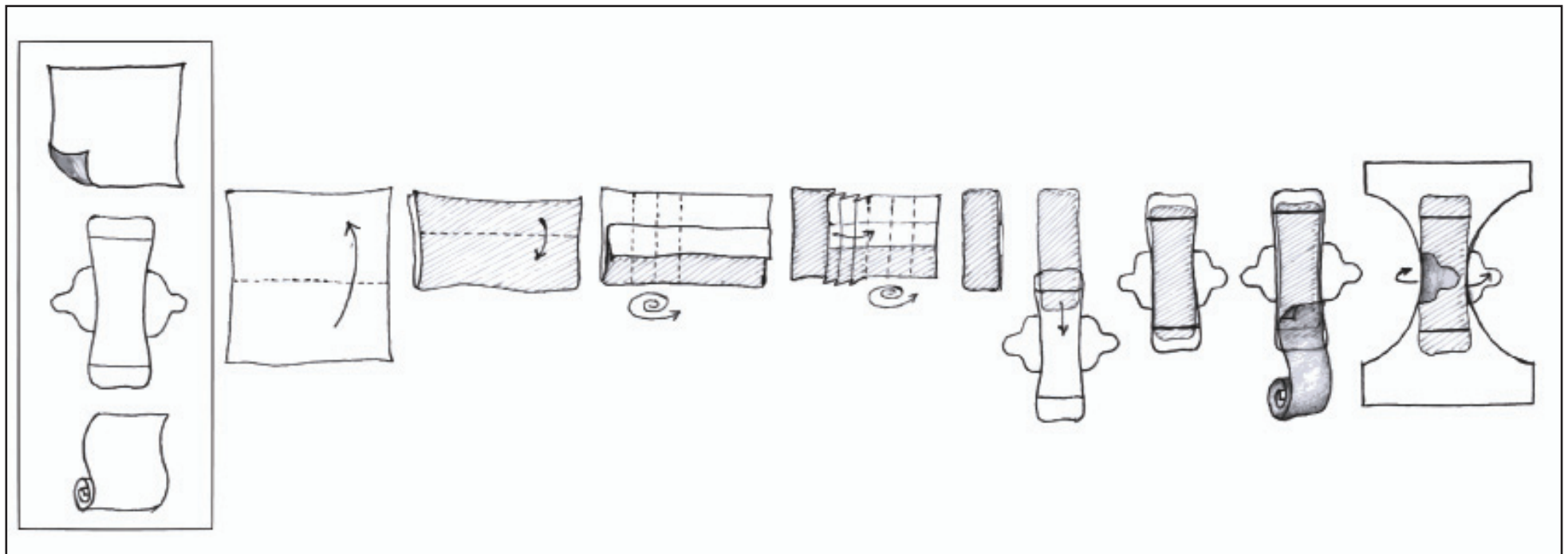


Instruction sheet

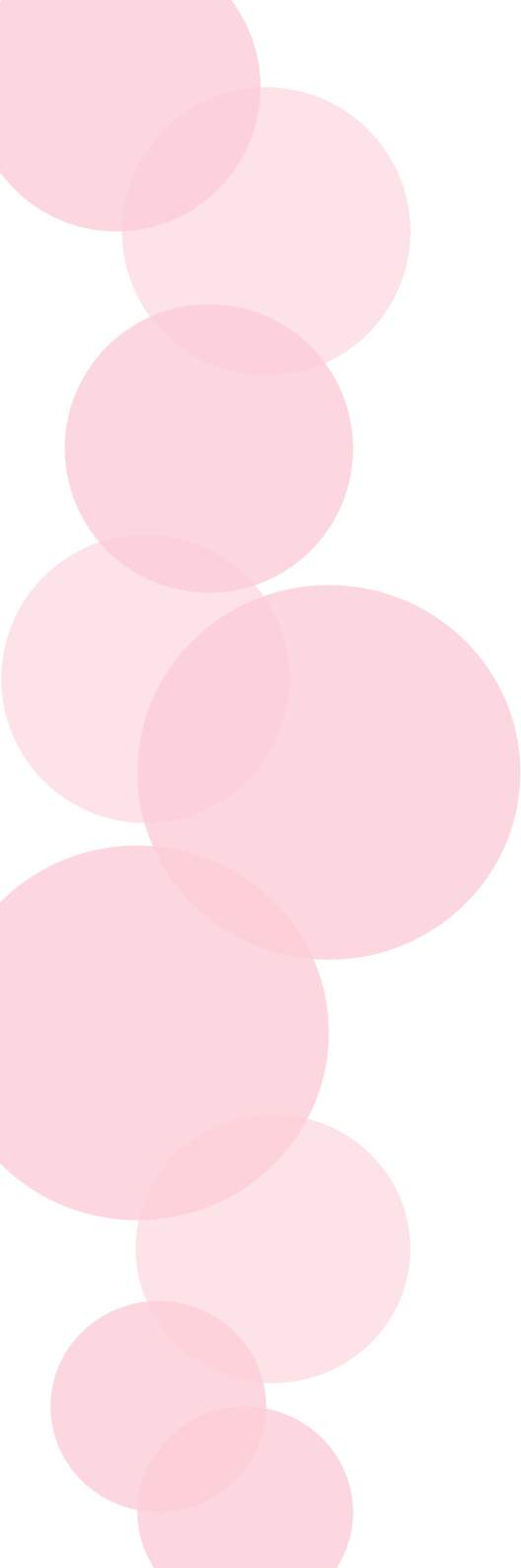
Hand done graphics- More earthy

Size- Half A4 sheet

Avoided language



Packaging



Importance to
packaging - Importance
to the product
and hence giving
***importance to
the subject.***

Packaging of the Menstrual Kit

1. Look of packaging- Feminine, neat, hygiene
2. Eco friendly, biodegradable
3. Reusable
4. Take care of odour and moisture
5. Should give dignity to product

Options for Packaging

Easy material availability- News paper, Plastic or Cloth

Paper tears fast and attracts everybody's attention,
plastic expensive, needs manufacturing and
not biodegradable

Cloth Packaging finalised:

Stronger

Reusable

Easy to define feminism

Porous Material

Encourage women to store the clothes better

Potli Concept



Simple Potli



Simple Utility bag

Treated better

Culturally familiar

Simple to make

looks better hence impact on user

Provision for keeping silica gel or



While giving the user : The content has to be rolled on the news paper before putting it in the cloth bag.



Batua Concept



Culturally **familiar**

Contents better **organised**

Segregates

Easy to make

Availability of **Material**

Encourages women to **store** the washed clothes **properly**



Option 1: Wider Batua



Option 2 : Less width, Use of Saree material for pouches

.

Can become more compact.

use of Saree material makes it frugal and flexible

Brand Name and Logo



Brand Name



Using Wooden block or Rubber stamp

Meaning to the product- Helps the women, Cleanliness, Hygiene

Name to be in Hindi or Sanskrit

logo- Simple, Indian, Mono colour

Economical and Fast process-
Use rubber stamp or Wooden block

Name options- Swaccham/ Swaccha, Jagruti, Jagruk, Chirayya etc.

Sakhi - Means 'Friend' in most Indian Language.

Running Handwriting

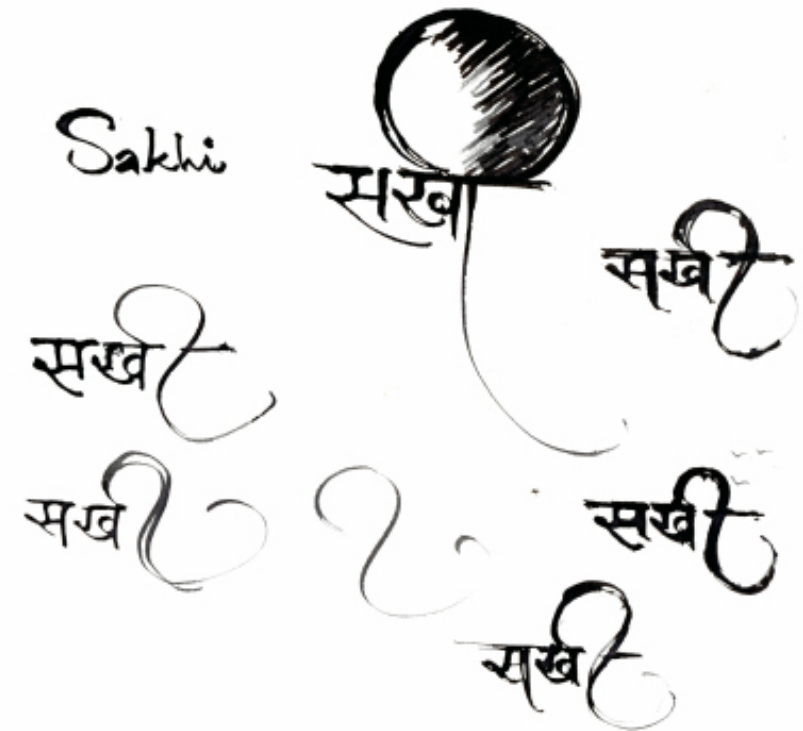
Tagline-Periods referred as
'Unn Dino Main'.

Birds- Sign of Freedom



Initial Idea

Iterations on logo



Final Logo





Validation and User Feedback

The product was discussed with :

Girls at Vatsalya Foundation

Goonj Foundation

Dr. Abhayankar

Girls at Vatsalya Organisation

spoke to about 25 Girls who use cloth

Thick centre will be very helpful

Understood the foldings very fast

Barrier sheet will help them feel more secure

Curious about the Top Disposable layer

Packaging was a good surprise. It will help in storing the clothes better.

Goonj Organisation

Discussion with Goonj Staff

Found the **folding Innovative and Simple**

Gave **suggestions on Barrier sheet** as what will work better in the scenario.

Feedback on the **fixtures**

Liked the idea of top Disposable layer but were not sure if it will work with Goonj

Dr. Abhayankar

Discussion of idea via Mail

Found the design **Practical**

Suggested to use **Waterproof material for Barrier Sheet**

Was curious about how to implement the idea of **Top Disposable Layer**

Suggestions on what kind of Adhesive to be used on Disposable Layer-
thin spray of pressure sensitive hot melt adhesive.

User Feedback

Liked the design at first look

Needs to be a little bigger

“ I don't mind using the cloth after my second day after using this” said one of the users

Will feel insecure to use it on the first day



Production and Distribution System

Some basic systems on how the product will reach the end user is suggested.

Collaborating Design With Goonj or Goonj Like Structure

An existing System

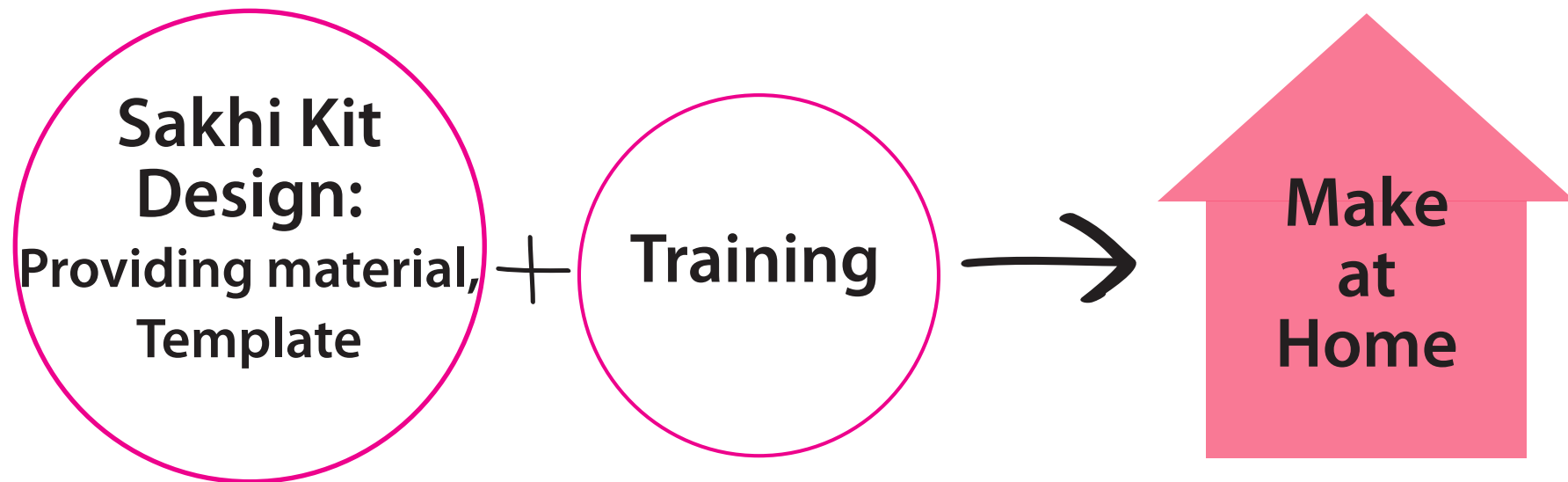


Advantages: Frugal, Existing System

Disadvantages: Might require better skills and Understanding

Make it yourself Kit

Involving the User



Advantages: Frugal- one time kit, User is involved

Disadvantages: Lot of training, Can get Uncomfortable



Means of Finance

Finance for Making and distribution.
Assumed that an organisation or Small scale industry is making these pads

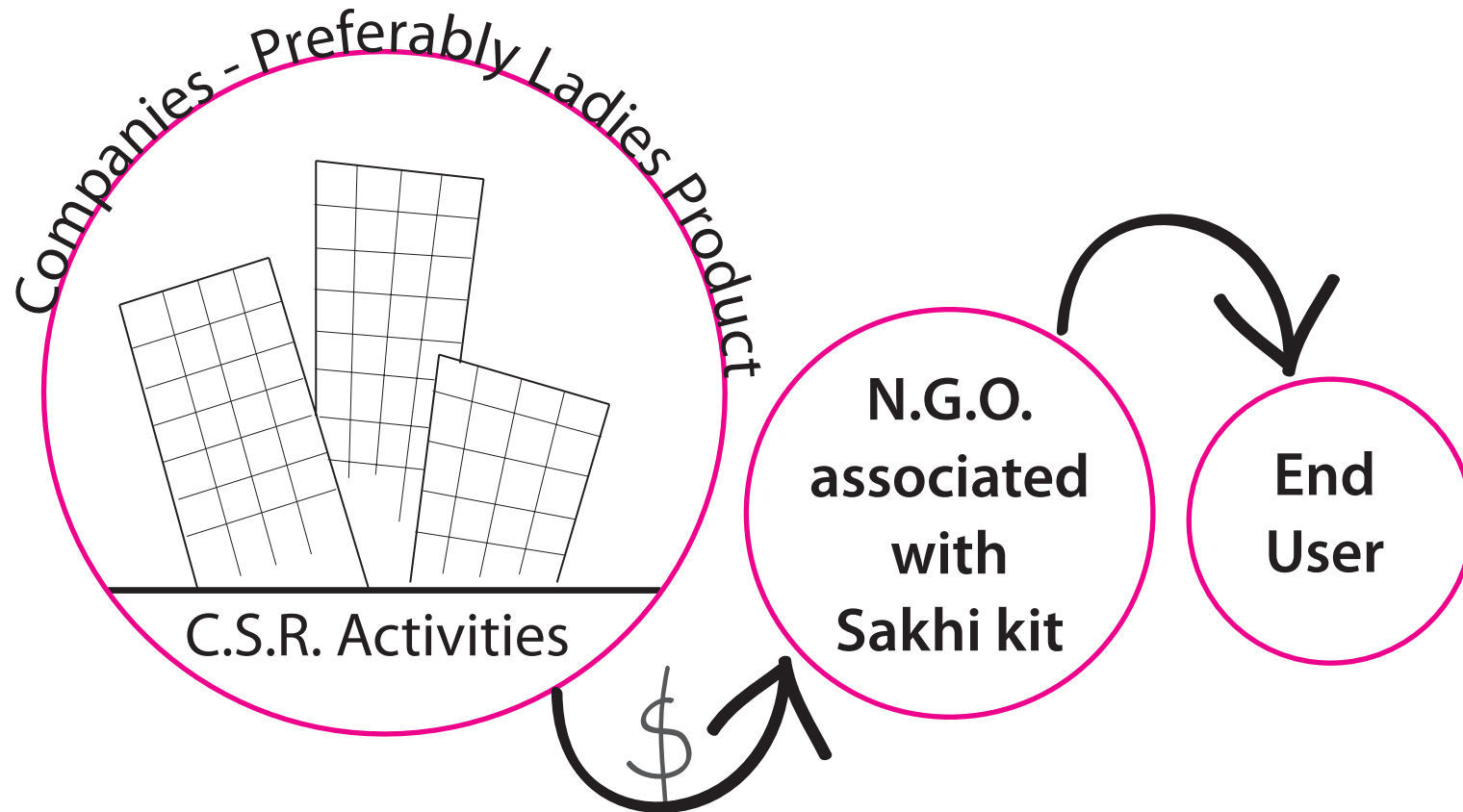
Cross Subsidisation



Advantages: Providing best Material, Use of new clothes

Disadvantages: Inequality in Number

Sponsorship Method



Advantages: Existing scheme and Continuous flow of finance

Disadvantages: Getting sponser not easy

Thank you

