

Women in Relief Camps

Assam floods

Theme: **Design for Crisis**Rebuild and heal the world with design

<06.08.2022 and India>

Team



Name : **Akanksha Sharma**Title: Creative Educator
Role in the Project: Campaign
and business model



Name: **Oshin Chawla**Title: Visual Communication
Designer
Role in the Project: Visual
designer



Name: **Ria Shah**Title: Information Designer
Role in the Project: Product and
market research



Name: **Sachi Dhingra**Title: Service and System
Designer
Role in the Project: User
experience and research



About Assam Floods

Assam is a flood and erosion prone state in the Brahmaputra basin in Northeast India. Since 1954 the state has withstood 13 devastating floods*, this year being no exception. 2022 floods came in two waves*, initial flooding started in May 2022 (due to pre-monsoon showers). As on June 17, 8 rivers are flowing above high flood level and 3 above danger level in the state*. 2,930 villages have been impacted by flood incidents, including approximately 1.9 million people, over 100,000 of which are taking shelter in 373 relief camps. Estimates from field officials say 1/10 of the women in these camps are either pregnant or lactating*.

These relief camps face issues like lack of food and water, hundreds of people sharing a single toilet, lack of menstrual hygiene facilities, lack of firewood, etc.

People of Assam

Majority of Assam's people live in rural areas. Hindus, occupying 61.47 percent of the population, form a majority in the state of Assam. 18 out of 27 districts in assam are followers of hinduism. The muslims, comprise of 34.22 percent of the population while the Christian population is 3.74 percent. (census 2011)

Problem Identified

PROBLEM DESCRIPTION

Nutrition, health, hygiene and sanitation for pregnant and lactating women, in relief camps, in the flood prone areas of Assam.

Relief camps in Assam lack basic amenities like toilets, potable water, food etc.

Crisis: Assam Floods 2022

Problem: Nutrition, Health, Hygiene and Sanitation in Relief

Camps

Target Audience: Pregnant and Lactating Women



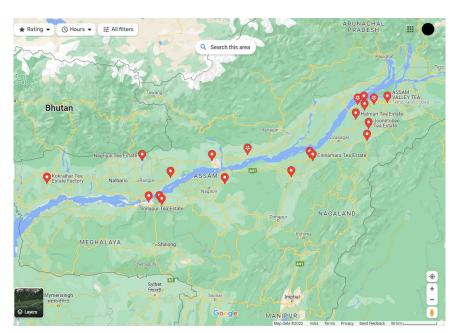


Research Questions

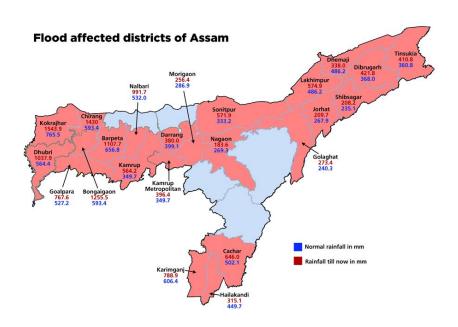
1. PERSONAL - Reimagine the life operating system

- How might we make relief camps safe and comfortable for pregnant/lactating women?
- How might we provide basic essentials and decent sanitation facilities needed by these women?
- How might we make sure they are easy to provide and are feasible in the disastrous circumstances?
- How might we provide the basic nutrition required by pregnant/lactating women?
- How might we prevent delivery complications (like premature birth, low birth weight, etc) in a pregnant women?
- How might we prepare and be ready to provide what is needed for future disasters?
- How might we prevent the spread of diseases/ infections (like UTI's) among women as a result of unfit living spaces?





Map 1: All tea plantations in Assam located



Map 2: Flood affected districts of Assam

Urgency and Importance

WHY IS IT AN URGENT PROBLEM?

The Assam floods have been a recurring problem each year with the Brahmaputra and Barak River having more than 50 tributaries, the devastation during monsoon periods is concerning. This year, Assam had the highest casualties, as of 26 June, 2.2 million people including 790,000 women have been affected, 121 lives lost and 35 people have been reported as missing.

There are 564 flood relief camps functioning with 217,413 people in camps including 61,878 children, 574 pregnant/lactating mothers, and 46 persons with the disability. 1/10th of women in relief camps are either lactating/ pregnant, they require special care and hygienic conditions to stay in.

Women are often hit the worst in the assam floods. Many of their health, hygiene and sanitation needs are often not catered to in relief camps. Plenty of diseases can spread due to lack of basic hygienic and sanitation facilities. Their responsibility towards their home and kids also increases with the worsening of the floods. Many women do not go to flood shelters due to the lack of security, abuse in relief shelters and relief queues.



Assam continues to be the state with the highest women mortality rates in India, with adverse effect of floods, the relief system for floods needs to strengthened for pregnant women in particular.

As stated by the World Health organisation, natural disasters are a sudden ecological phenomenon of sufficient magnitude to require external assistance. Thereby regions prone to disasters are likely to bear the brunt emotionally as well as financially. Elevated levels of psychological distress is caused due to factors like lack of resources, loss of loved ones in the disaster, loss of one's home and financial assets. For women, new mothers and pregnant women, calamities come with an added level of stress. Their physical and mental well being is at stake. Everyday survival becomes a struggle.



Target User Persona 1



PROFILE & DEMOGRAPHICS

Name: Sapna (27)

Job Title: Temporary laborer at a tea plantation industry

Gender: Female (Age: 27)

Family and Social Setting: This Hindu family consists of a father-in-law, husband, a 4 year old son and the women herself who is currently 8.5

months pregnant.

Income: Poor (Rs. 3600/month)
Education: 8th grade pass

Location:

Home setting-House built with bamboo, wooden planks (Ikra house) Work Setting- Situated on the north bank of the mighty Brahmaputra, the

Durrung tea plantation is one of the oldest tea estates in Assam.

Area- The garden and the house is located in the 2nd largest district of

Assam - Sonitpur, with its headquarters in Tezpur.

GOALS & VALUES

Goals: - To keep herself safe, healthy and away from diseases to protect the baby.

- To have a safe and smooth delivery.
- To be able to use the toilet when she needs to.
- To get the nutrition the baby needs and get enough food for her son.
- To get enough clean drinking water for herself and her son.
- To not have to worry about the basic needs of the family like food, water and them catching diseases.
- To stay clean and comfortable.

Values: - Believes that her son's and family's needs come before herself.

- Will do anything to protect her son and unborn baby.
- Believes that they have to make do with what is being given to them by the camps and nothing much can be done about it.

Motivations: - To protect her unborn baby.

- To keep her son and family safe.
- To get the basic requirements that a pregnant women should, like food, water, sanitation, medical professional help, etc.
- To have a smooth, safe delivery and have a healthy baby.

FEELINGS

Worries:

- She might not receive the emergency medical help during floods as access to skilled and emergency care is either unavailable or limited
- During floods she lost her medicines (iron tablets etc) and the extra money her family had saved for her operation.
- At the relief camps or the hospital she might not find enough blood banks for either during or after the operation.
- She worries she would have a premature birth due to all the stress and physical activity that she has to do during the floods.
- She doesn't want her newborn to get any infections in the relief camps.

PAIN POINTS

Fears:

- She fears losing her child in the womb due to these unfavourable conditions.
- Fear of delivering in relief camps with no or little medical help.
- Uncertainty about taking care of the newborn amidst a crisis.
 (infections, malnutrition, lack of clean drinking water)
- Complication during pregnancy can be stressful, lack of availability of blood banks.

Frustrations:

- Unable to keep her private parts clean
- Dealing with stomach and back aches, even cramps.
- The relief camp near her residential place is a school and has only 2 bathrooms for over 200 people.

Challenges:

- Little access to roads during floods for emergencies
- Managing emergency supplies, kids, food, and their own health all the same time during floods
- Defecating in the open becomes a major challenge- with kachha toilets and improper infrastructure, it becomes difficult and uncomfortable for a pregnant woman.
- The money saved for medicines and operations for pregnancy is used or lost in floods.

Target User Persona 2



PROFILE & DEMOGRAPHICS

Name: Mukhida

Job Title: Homemaker Gender: Female (Age: 21)

Family and Social Setting: Belongs to a Muslim family and was married off a year ago when the floods ravaged out her village being the eldest in the family. Gave birth to a baby boy named Abdul 4 weeks ago and is now a lactating mother residing in a relief camp in Nalbari, Assam.

Income: 1600-2200 Rupees

Husband is the only earner in the family working as a daily wage worker away from home in Guwahati.

Education: Left school in sixth grade to help father in the field

Location:

Home setting-

She was married into the same community but had to move to the Kamrup district to live with her husband's family.

GOALS & VALUES

Goals:

- -To be able to provide adequate nourishment for her newborn
- -To be able to stay healthy
- -To have privacy to breastfeed
- -Access to clean and hygienic toilets
- -Awareness about common diseases in lactating mothers like anaemia
- -Accessibility to proper check ups especially in the postpartum period.

Values:

- -Believes that the there is nothing that can be done about the problems she is facing and she has to make do with whatever the camps are providing.
- -Follows the traditional belief system of prelacteal feeding (The common beliefs for delayed initiation of breastfeeding were that it was harmful or not ready to be fed for 3 days.)

Motivations:

- -To prevent malnourishment in her newborn
- -To provide essentials related to nutrition, hygiene and security to her child
- -Remain healthy to take care of her newborn

FEELINGS

Worries:

- Lack of emotional and physical support of family in absence of her husband.
- Might be suffering from vaginal infections
- Constant anxiety about the responsibilities she is going to have to handle alone
- To have a secluded area to breastfeed
- Access to clean water for drinking and sanitation for herself and the newborn
- Worries about getting adequate food for the newborn for the initial 3 days since she believes in prelacteal feeding (here mothers feed plain water, salt or sugar solution, honey or diluted cow's milk for the first few days instead of her breast milk)

PAIN POINTS

Fears:

- Losing her child because of inadequate nourishment or and disease he may catch in the relief camp's environment.
- She won't be able to breastfeed as she might have to go looking for work soon.
- Developing diseases commonly occurring in premature babies and lactating mothers.

Frustrations:

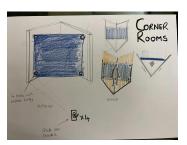
- Weakness from childbirth
- Exhaustion that is making breastfeeding harder
- Lack of proper meals in turn unable to provide required nutrition for the child through breastfeeding
- Lack of basic facilities

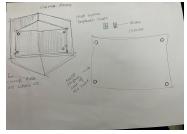
Challenges:

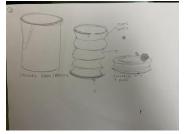
- Unawareness about proper nutrition and common occurring diseases in lactating women like anaemia
- Lack of basic facilities for the newborn like clean and dry clothes
- Poor hygiene and sanitation practices at the relief camp
- Lack of access to health centre and hospitals in case of emergences

Explorations











A regular fetal monitoring, especially in the last trimester of pregnancy, is extremely crucial.





Already

anaemia in pregnancy was considered as a priority area for high-risk pregnant women

need for education to

improve awareness and institution of standardised

screaring to identify women with pregnander

complicated by HDP and

hypertensive disorders of (GDM)

A handheld device to

detect jaundice









Women Measure Their Baby's Heartbeat without Docs

This article has been published in partnership with Marico Innovation Foundation. For 31-year-old Ajitha Patki Muglikar, experiencing pregnancy was one of



It also sends realtime alerts to the presiding health practitioner in case of any abnormal results.

The Mumhai-based healthtech

startup's portable pregnancy care

platform uses smart algorithms to

slums and connect them to

gynaecologists.

What about electricity it the battery dies?



Jaundice may occur if the liver can't efficiently process red blood cells as they break down. It's normal in healthy newborns and usually dears on its own. At other ages, it may signal infection or liver disease. Symptoms include yellowing of the skin and whites of Some newborns may require light, therapy for a day or so, in other cases, troatment involves addressing the underlying cause.

SMARThealth

Controlled Trial

Pregnancy: Feasibility and Acceptability of a

Complex Intervention

for High-Risk Pregnant Women in Rural India: Protocol for a Pilot Cluster Randomised

babies have a high number of red blood cells in their blood, which are broken down and replaced frequently.





BiliSpec





handheld batters powered device can diagnose jaundice within two minutes using just a \$0.05 paper strip and a drop of blood.





CareNx Innovations takes quality healthcare to the doorsteps of rural pregnant women

screen high-risk cases in villages and slums and connect them to



HOW TO USE











 ■ ELECTOMANIA ® Plastic Retractable Handhold Bidet Portable of Antislip, Bidet Angled Nozzie Spray with Travel Dag (Green, 500ML)

40% 599

OMNENS

Nic Ocer E18

90 60 GJ R







(" " *)





high-intensity



Periodic No Sp key

NRE: 6209 - \$160

Yes true Stroptste Industrial of tons









Moternity Pod





Sanfe Stand And Pee Disposable

Device For Women - 20 Funnels

Visit SAVIE Store

₹269.1 MRF#399

Leituncy by Today, Before 10100 pm.







4.00 *

Manual Breast Pump (1N) Maternity Pads - 8 Pads (480 MM) -Pack of 2 Freezer Safe Breast Pump With Storage Extra Soft & Anti-Leakage Disposable

₹ 699.00 ₹ 1,299.00 (46%) ₹ 449.00 ₹-598.00 (25%)

4.47 *

Maternity Pad

1 1 = 1



Disposable Breast Pads - 24 Pads

Soft micro-cushion & Breathable Disposable ₹ 249.00 ₹-399.00 (38%)

4.56



Disposable Maternity Pads And Disposable Breast Pads For The Complete Care Of A...

₹ 449.00 ₹ 698.00 (36%) 4.39

Minimally measure,

1 (1) Add To Cart Add To Cart Add To Cart Add To Cart



Applicable to newtorn of all ethnicities and all over the world

Final Solution & Innovation

How does your solution address the problem identified?

Toilets in relief camps- especially in flood prone regions are limited to the infrastructure of the relief camp. Most of the schools in and around the flood prone regions get converted into relief camps.

With hundreds of people using the same space, toilets become one of the most unusable spaces- especially for women. With our target audience being pregnant and lactating women in relief camps, it becomes very difficult and unhygienic for them to use

How is it innovative?

Our intervention makes private spaces accessible for pregnant and lactating women while making toilets



User Experience

How does the UX of your solution look like?

The introduction of Peeschute with a makeshift private space allows our users- pregnant and lactating women to have a hygienic, multipurpose space which otherwise would not have been provided in relief camps.

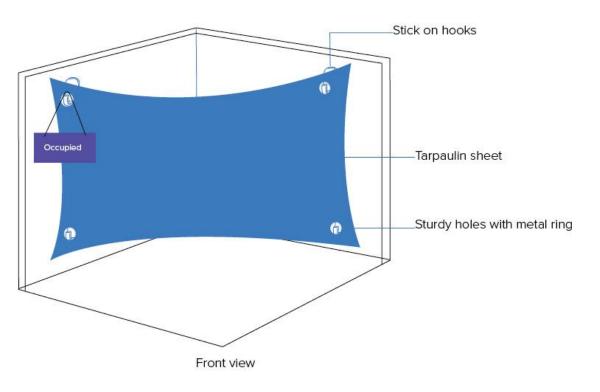
With only one unisex toilet for hundreds of people, pregnant women are more vulnerable to catch diseases.

Due to the frequency of urination in pregnant women, they have to wait for hours to get a vacant toilet.

The user experience of our solution is sustainable and easy to use for the following reasons:

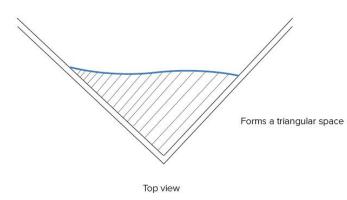
- The corner rooms are easy to set up:
 - The corner rooms require minimum efforts to set up. They are formed using the existing infrastructure of the relief camps and a few other equipments.
 - A tarpaulin sheet with 4 punched in holes along with 4 stick on hooks will be provided. The overall set up requires very little labour as well. The person setting it up needs to keep in mind the instructions provided in the manual to set up a corner room.
- The Corner Rooms are only for women and are multipurpose
- The provision of the Peeschute bag allows pregnant women to urinate as frequently as they want without being scared of cathing infections
- Allows them to pee in a hygienic space.
- Provides lactating women with a private space to breastfeed.





Corner spaces

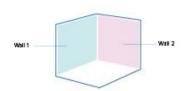
is a small design intervention created by us alongside the Peeschute collaboration to provide private spaces for pregnant and lactating women in relief camps using minimal materials.



Instructions

1 Identify

Identify a corner in the room you are placed in- a space where two walls conjoin



2 Open

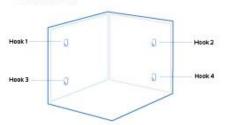
Open the kit for the following materials

- A tarpaulin sheet
- 4 stick on hooks



3 Measure

- From the point where the two walls coincide, measure — cm in a straight line and place the hook first hook on wall 1
- Using the same technique, place the second hook on wall 2 at the same height.
- Both the hooks have to be equidistant from where the walls coincide.
- Place the other two hooks vertically downwards from hook 1 and 2 respectively.
- Unfold the tarpaulin sheet to hook it at the respctove 4 corners.
- Hang the occupied sign on one of the hooks when in use.



4 Use

The space is for and should be used by women only.

The space can be used for:

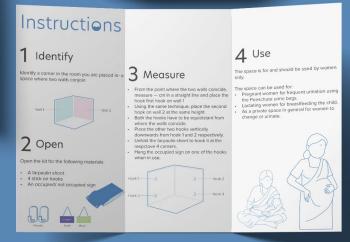
- Pregnant women for frequent urination using the Peeschute urine bags.
- · Lactating women for breastfeeding the child.
- As a private space in general for women to change or urinate.



This brochure gives the on ground officials instructions to set up the space with the materials provided in the kit.







Design Process

- 1. Systems map
- 2. Interviews (we can add that screenshot)
- 3. Ideation boards
- 4. Affinity mapping
- 5. Initial drawings

Systems map UNICEF helplines External Organisations Media UNDP Communication Cooked food Gas firewood Litghing neighbouring villages Cooking/food facility camp kitchen community centers Raw Food Police officials Private spaces Vessels financially stable houses People Infrastructure appointed to Schools drinking water Anganwadi Relief Generators fo power back up camps water for domestic Bathrooms use Private Manufacturers Homes of people in Sanitation relief camps All People who need help of relief camps Old people medicines Dignity kits Toiletries Toothpaste Health Care First Aid Kits Treatment for Mental health Men Sanitary pads paper bag Children Health care professionals Mobile medical team widow Government Orphans Lactating gynacologists women Trasnpotation NGOS Rescue Boats

Interviews

We conducted a couple interviews to understand the situation on ground. We contacted NGOs like FFF, Goonj, Rapid response, Habitat for humanity india trust.

We spoke to a few people living in Assam as well as reached out to organisations like Goonj and Friends for floods to get an understanding of what it is to like working on ground.



An interview with Subhashish Day the founder of Friends for Floods.

Interview 1 Founder of Friends for Floods

What has Your experience been working on ground? And what did you observe about women on ground?



Women get most

affected- especially

girls who are just

getting their

periods, pregnant/

lactating women

and the elderly.

The toilets are

primarily made of

4 bamboo poles

surrounded by

tarpaulin sheets

What about providing milk packages? are they a part of relief kits? since it becomes an important part of pregnant women's diet



7 5 days of gimmicks by the overment	Discrepancy at the working level	Relief camps are jam packed with people	the governments usually vacate schools and put people there	there have been instances of sexual violence in the camps	not safe for minors	quarrels among people due to lack of space
After the floods reside, the situation becomes very unruly	there is a delay of 10/15 days even after the flood residents to get back to their normal lives gnant women do place in such situ.	you find in relie		oximately) and h	ow do	
leliveries take	place in such situ	iations?				



team to even get

this kind of

information

months pregnant-

the others have not

been accounted for

kinds of blood

are available

Are there any blood banks available?

Are there any bi	ood banks avail
Poorly maintained	even if blood banks are there, not all

the medical if local clinics cannot handle the case, they send the patient to the district hospital and if that also does not work, then the patient has no choice but to go to developed areas

the women/ patient has to run around from one place to another even when

they are not capable

of doing so- some

even end up dying

Fund of

Assam

lack of medical FFF has a campaign/ collaboration with

with BOAT have to take them to hospitals CLINICS

carry out deliveries but

in case of

complications, you

On the brighter

side- UNICEF and

Sanjay Hazurikha

have come up

Sensitising the Even the men masses about the should be menstruation familiarised with the same

this is quite

approximate

blood banksvery tough to find them In order to do this, a local understanding should be thereof the village, its people

accessibility is also very weak

terrorism

in regions where its the most required

infrastructure

so they are unable

to deal with critical

situations related to

childbirth as well

you tubers Abhi issues- this way a and Niyu on new intervention will work menstrual cups

rashes or skin allergy ring worm khujil skin and knee sari is wearing rashes or skin allergy	cancer malignant	vear clothes non	tion of the new born: v born. habies care en, cushioning confort product kit	openess around medical help	Timely Vaccines around kids people	Locations that were affected: Puri, Baleshwar, Ganjam	survival of the fittest		
ring worm khujil skin and knee sari is wearing sctating women breast puss ifficult situation	Blue breasts- become painful						NDRF G	PS like conj wide thes	which means, they are used to going out the without doctors/ medical facilities around.
beliefs around	The problems last for 1- weeks		Women face many problems eg: If the girl is menstruating				The belief systems of women/ locals regarding healthcare	Women are not open about raches! diseases that are caused due to wet cloth-they usually hide them.	enter il carres so differente budesso the cerceptor granging in production of the common of the common of the common of the common of the common of the common of the common of the common of the other than the common of the common of the other than the common of the common of the common of the common of the common of the common of the common of the other than the common of the common of the common of the common of the other than the common of the common of the common of the common of the other than the common of the
Dai ma	the floods the occurred in 9 was Odisha' largest flood	9' suddenly hit by a cyclone, she was	The distribution extends owners who except that The project individual is planted to the distribution of the con- cept to the behalf of the conser- pted duction behalf of the distribution of the and the distribution of the con- trol shape and the artists were facing also from a superior angreeous of control station as and.	the ambulance also took really long to come and get the lady.	Sanitation goes beyond floods		The awareness to get medical aid is very important.	However, challenging their belief systems in itself becomes a challenege	The calls comes were surround to work of memory and with comes were and an impact were
esser taboos regarding reastfeeding the baby in public	Packaged milk suppl shortage	y days, however in 1999, they	They usually send only dry food like 'Chuda' with sugar or jaggery, live survival foods: gives you energy! carts.	It is not possible for them to provide milk since the bags will tear (they drop it from helicopters? planes)	Also, when they get milk, they have to supply it within a day otherwise it gets bad.			mobile van- Doctors	stonychos interestination of the stands of t
A lot of women use cloth during nensurating and bleeding	Another friend of bars said that her house which was ar the ground floor was totally submerged in the water.	so they want to the mod ear theirs worther only palks. Search, we spore work house was model of day, half of the old logs water to their sear to take wholes.	They stayed like that for 3 days and only fed on the katcha also and the popays they got from the trees nearby.	People were unable to use the toilets as well as everything was 8/3 feet submerged in water.	only after 4/5 days do they get relief in such areas.	This is the situation in the city	Has the governm raised any fund made schemes provisions for po flood repercussio	to rebu	uild s/
reusing the same cloth sashing it in flood water (unclean water) - wearing wet clothes	When't come to villages, the land has been reade of the gat maked away causing a late of deaths, some people who get gloss, some people who get gloss hamming, have and readh suit troused read readh and troused read campe and come took site the maked leash results.	their houses usually get infested with snakes, insects- sometimes they even find snakes and other creatures inside vessels.	they have literally rebuild everything from scratch- their houses/ food, clothes etc.	Government aid is also not very consistent, some places receive it while some don't.	During the 99' floods, aid came from all over the world	Australia also provided a lot of aid			
t just a solem uring sods	Corruption among government officials also keeps people from getting the required aid.	The Markets sent floor Auto data were made of port in soci the government theretakes and gove the older chest to the Williagers.	Shakuntala Ji talks about the 2013 floods- she was at her village only	A hazardous incident took place	Oi tanks/ perrol tanks are under ground-due to floods, water entered these underground spaces and overflowed	spilled and covered most	engerous situation (even a small matchstick would have caused the		unseen nexpected effects of floods
	all fired pieces made by potters got wiped off- 20 days of hard work	The floods affected the Ivel hoods of many-text IE owners sold their clash at 107 20 percent discount after the floods resided.	all major senices like hospitals were shut-the ground floors were completely submerged in water.	broken electric wires- people die due to electric shocks	the species of technology being advanced as compared to 39° - 2 seeds in solutions they are serious assets for though and exact states 410°C.	Referring to Odisha's working model	West Singul, Andre Freeholt and Oders state government have street, mate obelies in coveral areas (avering fallowing and people forig diese to contail areas)	The state drap people out of their homes or calcular policies out that they record the lessed creation they vice phem in relief ple sters for about a work and their list them go	geographical factors
Family an communi is the fist respond	ty doctors/ professionals to visit the area/	news/ media pay an important role in communicating the situation and the intensity of it to the governments	Rural mindset of people does not allow them to share everything with doctors- especially the women	The women might be open to taking sanitary pads etc	Pollution caused by improper disposal of diapers/ pads	trauma regarding loosing family members	Government aids are not sufficient	Effect of media- threatens the govt to take more hands on approach during relief	People are informed about the scenario outside relief camps

Solution Suggestions

providing spaces for pregnant women & lactating women Hygiene issues-	more than one mobile clinics for first aid more than one mobile	1999 Worst Orissa floods- lack of technology at that time	Undergrour oil tank hazards		
cleaning staff Awareness among people about keeping the relief camp clean	clinics for first aid Exercises for keeping mental peace	Schools and Colleges are converted into relief camps	Snakes and Insects four in submerge homes		
Mobile toilets	Distribution of menstruating cups	Demographic- in hilly areas only some areas get	Most people the village have to completely rebuild		
installation of pad incinerator	Breast pumps for lactating mothers	submerged The functionali			
Awareness regarding hygiene	Maternity clothes for pregnant and breastfeeding mothers	maternal cloth could be comb with their tradit outfits for com better accessit	ined cional fort/		
Separate beds, insulation, and oxygen facilities for new born bables	New born baby vaccinations like polio	etc.			

81. House Building Grant.

(1) On receipt of the preliminary flood damage report from the Collector, the Board of Revenue / Spocial Rolef Commissioner shall take steps for alternet of funds for payment of house building grant to the eligible persons. The scale of house building grant to be autherion of report of houses of predefined date to flood, cyclose or beavy rainfall for repair or reconstruction of their houses is as follows:

(i) For completely washed way houses Rs.3500

(-)	per family (maximum aid)
(ii)	For completely collapsed houses per family
	(maximum aid)
(ii)	For partially collapsed houses per family (maximum aid).
ation:	

Explanat (i)

Houses which have been completely washed away from their original sites leaving behind no building materials shall be treated as "completely washed away"

A house may be treated as fully collapsed if all the four walls 'and the roof have (ii)

collapsed." collapsed: A partially collapsed house is one in which one or more walls might have collapsed but the roof may still be standing on pillars or some of, the walls with or without damage to the roof. During cyclene it is possible that only the roof is completely blown off leaving all or some of the pillars in tact, in such a case the house will be treated as partially collapsed.

Rs.2000 Rs.1000

In the beginning, used to feel very irritated	"Bahut chidchidapar hota tha"	one shouldn't lift heavy things	first 3 months very important, one has to be very carefull	I had a miscarriage after 1.5 months in my 2nd pregnancy ,	I was washing a quilt when I tried to put I for drying, it was heav and that is why "mer pet neeche ho gaya fi bleeding start ho gaet	hot &	I should sleep on the side, else it would pain back	You should stay happy, watch nice things read good books	stress	With every ba you want to e different thin chatpata v.s meetha	gs-
Bharipan lagta hai - later on	Swelling in hands and feet	itching in lower belly region as it grows	frequent washroom	You have to sit also very carefully	WHile using indian toilets - have to be careful to not press the tummy	I used to feel like puking if I had pomegranate juice	"many women have bleeding & pregnancy together"	so my mom said it might be normal	didn't feel didn't feel g	oregnancy, I like eating, good, always ritated	
I used to not eat	vo baby andar hi andar sookh gaya	I used to eat once a day	Due to lockdown I didn't go the the hospital for checkups or ultrasound - didn't know exactly what was happening with the baby	started getting labor pain type pain one day	went to the hospital	breast milk started flowing and within a few hours I had the miscarriage	there were no eyes and nose, only tiny feet and it had turned black	i hadn't done checkups or gotten the necessary injections this time due to covid	I would just feel that it's moving- but it was already dead inside me	the check	month all ups happen ultrasound
With first baby I had a cesarian	it had been 13 since the actual due date and I wasn't going into labor - medical help req.	so they gave me medicines and had a cesarian baby	many mothers breastfeed their children for 2-5 years	I couldn't breastfeed for more than 1.5 months as "mera sab kat gaya tha"	I couldn't do it while putting medicines	Then I started feeding him amul milk	you have to eat have milk, dalia, while breastfer	gur, etc st	when I	en you have o stuff with otton - if you re travelling	many people give powder milk, but then the child pees a lot and doesn't get nutrition
you get a aanga with info and va that you and need to	accinations the baby	the beginning ve	months are	sed to go buy vegetables, washing, cleaning, everything	mai koi	oh 15 logo ka sasuri hai,	up at 11pm	used to be up all night	I never got very food at that time - nahi tha - toh doo jaldi apne aap h gaya	koi karta hi d bhi bahut	
one sitting	"maine time	3-4 times a	after the	even after a	"per lagake bethna chahie	all ladies who take the injection in the spine -					

About:	Had her first kid at 29	Was a working mother and would go to office	staying staying staying staying	e army and not little caying with her. comfortal the did most of lif he was er things/check she m	ove been a more more the faster there, but manged but half but hal	
What was your typical day during pregnancy?	Stroll for first 15-20min.Then have dry fruits/praying and breakfast She would go for work at 9 for the first three months she drove herself to work. Drove her car regularly	Had a very normal and carefree pregnancy her colleagues were very helpful	She would walk after her work for 15-20 min. This was because she was gaining weight End her day with music	Had a c shaped pillow that would help her sleep. She had problem sleeping in her last few rain blushs pillow helped	Medicines She had a lot of follic acid (iron) An anta acid every day	
What were the changes in your body?	Her legs would pain and her back. But mainly her legs	No morning sickness	Hed a pregnant fised who had nazera who work nazera who would sometimes pulse when the smelt something particular even outside or in office	No constipation.	Few mood swings. Aversions to some smells and food like rotis smell	Would get tired more easily .
	Had to frequently use the washroom.Every 45 mins in her last	Using the washroom frequently was a problem	General immunity decreases She got frequent colds and fevers during	General immunity decreases She got frequent colds and fevers during	She carried a spray to clean toilets and wet wipes	Higher chance of getting infection in he private areas

and fevers during

pregnancy

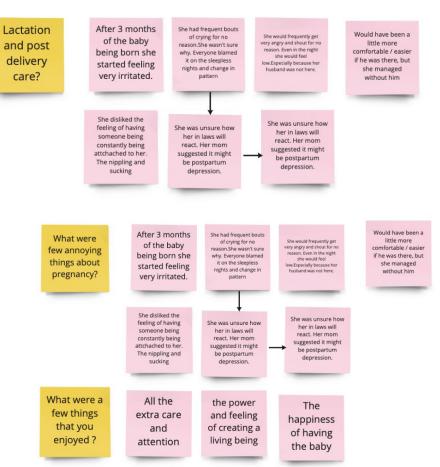
or UTIs

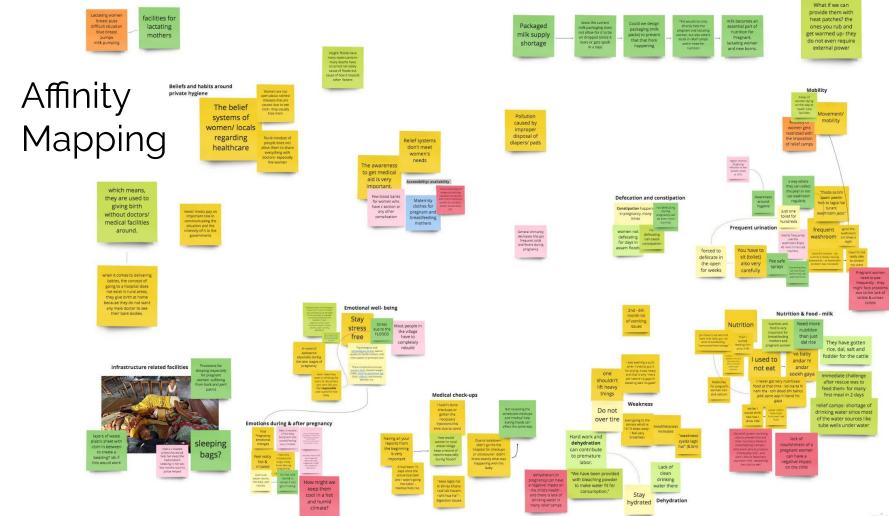
especially if she

was outside

45 mins in her last

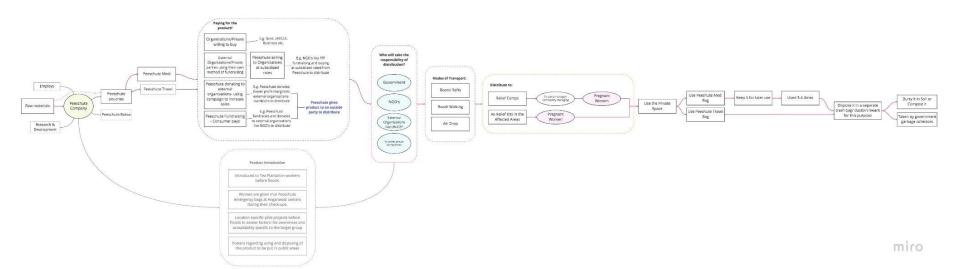
months.

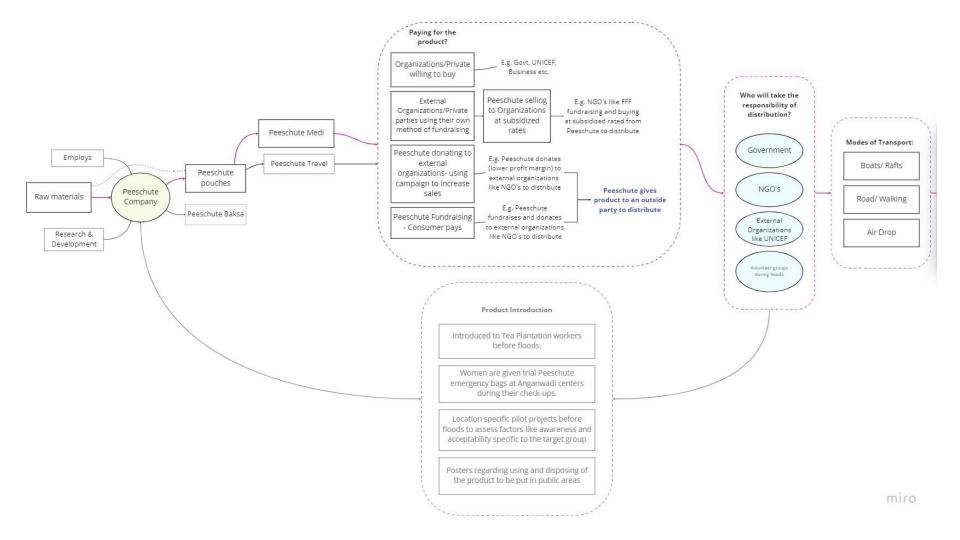


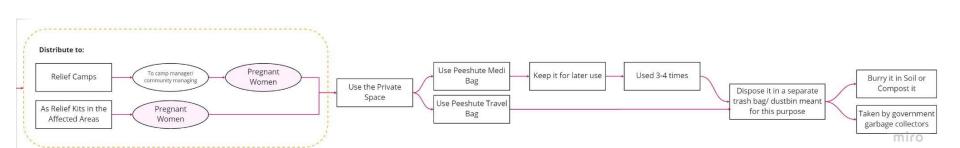




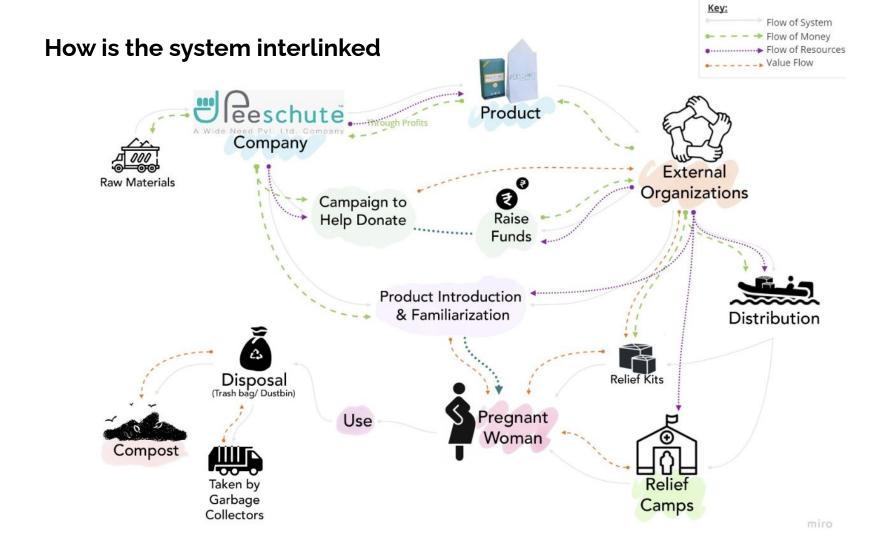
miro



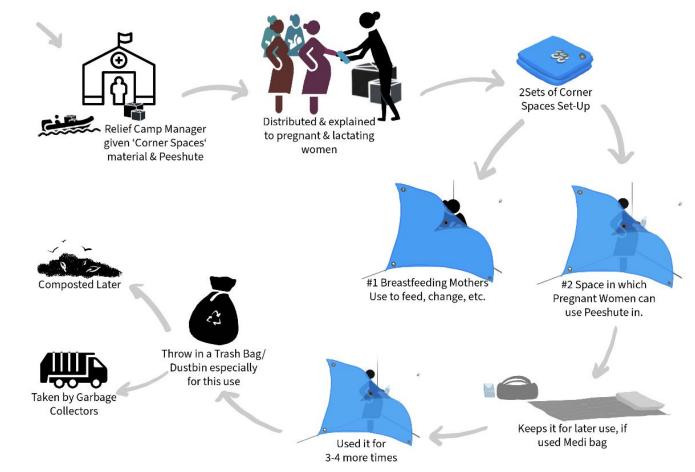




Simplified system map eeschute **Product** A Wide Need Pvt. Ltd. Company Company External Raw Materials Organizations 0 Campaign to Raise Help Donate **Funds Product Introduction** & Familiarization Distribution Disposal (Trash bag/ Dustbin) Relief Kits Pregnant Use Woman Compost Relief Taken by Garbage Camps Collectors



System map inside the Relief Camp



Insights

- 1. Crisis increases the mothers responsibility as she has to take care of herself, the child as well as the household requirements.
- 2. Belief systems of women hinder them from receiving the required aid even when facilities are available to them
 - Rural mindset of people does not allow them to share everything with doctors- especially the women
 - Women are not open about rashes/ diseases that are caused due to wet cloth- they usually hide them
- 3. High levels of stress persists even after the crisis (financial, rebuilding their houses etc.)
- 4. Relief systems/ camps do not meet pregnant women's needs.
 - Frequent urination for pregnant women makes it
 - o difficult and uncomfortable to go use bathrooms frequently
 - No provisions for sleeping/staying for pregnant women with back, joint and leg pain.
 - Hard work and dehydration can contribute to premature labor.
- 5. Lack of preventive measures for the recurring floods by the government causes more casualties.

Pregnant women



ust one toilet for hundreds

Bina,

29

Assam floods: Pregnant women, lactating mothers struggle in crammed relief camps

Life is tough for pregnant women, lactating mothers in a crammed facilities as Assam remains flooded.

no provision to filter iron-heavy groundwater drawn from a tubewell in the school complex. Officials said water purifying tablets are being provided to offset possible diseases.

Diseases



Assam: Pregnant woman rescued from flooded area after hubby sends SoS mails to CM, DC | Guwahati News - Times of India

A pregnant woman was rescued from an inundated area in Silchar town by the Cachar district administration after her husband sent SoS emails to

www.sciencedir...



Pregnant mothers' stress during floods can disadvantage their babies, but it's not inevitable. Here's what we can do right now Flood-related stress can have a megative impact on progrant moths

Objective stress is what happens to you: your house is flooded, your possessions are damaged or lost, you have to evacuate, you or your loved ones are injured or in peril. Subjective stress is your emotional reaction: shock, distress, anger, anxiety, depression.



17 Pregnancy Do's and Don'ts That May Surprise You



Lack of dean drinking water there

hydrated

dehydration

Have had a previous premature birth Overweight ar underweight

Pre-term labor caused due

Hard work and can contribute to premature

records, and a two-week supply of

any medications you are taking,

including prenatal vitamins.

Dehydrated

Flood Precautions for Pregnant Women

help you and your baby be healthy and safe. Be sure to have an enough If you need to leave the area to be safe, take a copy of your medical

Do not over tire

To decrease stress:

booath

concerns

Try to lie down on your left side three

Take deep breaths from your belly. You should see your stomach rise with each

Find a buddy to discuss your fears and

If you ever feel like harming yourself or

your baby, talk to a health care provider

times a day, even if only for 10-15

difficult temperament and lower social and problemsolving skills.

Babies of stressed mothers

were more likely to have a

The impact of flood on pregnancy outcomes: A review article

Flood is one of the natural disasters with high prevalence in the world. The aim of this research was to investigate the effect of flood on pregnancy ...

Of the pregnant women living in the camp, 24.79% had gestational trauma, 25.04% showed postpartum hemorrhage and 15.06% had sepsis. Also 9.28% of them died and only 24.86% were normal [17].

Psychological and physiological stress, lack of access to health centers, and interruption of prenatal care

These complications include preterm birth, low birth weight (LBW), small for gestational age (SGA), stillbirth, spontaneous abortion, etc.



Health Tips for NIDDK

Pregnant Women |

Morning Sickness

dal rice

Don't use steam rooms. hot tubs, and --saunas.

it is hot and humid in camps

than just

Odisha floods, pregnant

women taken on

stretcher, through the

water to the ambulance

drink fluids (particularly water) to avoid constipation.

Eat breakfast every day.

Eat foods high in fiber, and

Constipation

Sustainability

- Replicable model in other disaster prone areas.
- The Peeschute gel itself is biodegradable- once disposed in the soil, will make it more fertile
- Prevents the spread of diseases among women and children.
- Crowdfunding the Peeschute bags can create awareness about the issues faced by women in disaster prone areas- generating empathy among the masses.
- The materials provided in the 'Corner Spaces' kit can all be locally sourced.

Practicality and business viability.

Introducing the product:

- Introduced to Tea Plantation workers before floods.
- Women are given trial Peeschute emergency bags at Anganwadi centres during their check-ups
- Location specific pilot projects before floods to assess factors like awareness and acceptability specific to the target group
- Posters regarding using and disposing of the product to be put in public areas
- Base on the plot projects and first level of user testing the system can be changed



Practicality and business viability.

Funding:

- Peeschute Company funds through consumers and sales. Campaign (Cause Marketing) - NGO's distribute
- Organisations like UNICEF can provide funds for procuring Peeschute bags.
- NGO's like Friends for Floods (FFF) buy the product through donation money and distribute it.
- Peeschute can sell it to NGO's at a subsidised rate.
- Government buys from Peeschute
- Donation based crowdfunding platforms used by NGOs.



yourstory.com

This entrepreneur has developed an ecofriendly urine bag for just Rs 15

Founded by Siddhant Tawarawala, Peeschute manufactures eco-friendly unisex disposable urine bags as well as provides a waterless urinal solution.

Practicality and business viability.

Why Peeschute specifically?

- Peeschute is a local Indian company. This makes sourcing easy.
- The bags are biodegradable and can be converted into manure.
- 800 ml each urine bag, can be reused (3-4 times) till full (medi)
 {normal one is one time use}
- Doesn't have a completely established single sales market yet.



Open & Press Edges

Place your forefinger & thumb at sorners of the opening of the hag. Gently press the edges to make an opening.



Position the bag rightly

Hold the bag near your urinal area and position it rightly so you don't miss the aim.



Release the Pressure

Place and adjust the opening of the bag to cover urine-flow area between your legs. Let go to the pressure and urinate in the bag. The urine will be converted to a gel form instantly.



Fold and Seal

Fold the bag at the dotted line marked "fold here after use" to seal and avoid spillage.



References

https://www.msn.com/en-in/news/other/assam-floods-why-brahmaputra-river-basin-management-is-the-need-of-the-hour/ar-AAZtYGX

https://www.outlookindia.com/national/assam-floods-2022-ground-report-from-kampur-at-nagaon-district-news-206893

https://reliefweb.int/report/india/situation-report-assam-floods-22-jun-2022

https://www.hindustantimes.com/india-news/assam-floods-pregnant-women-lactating-mothers-struggle-in-crammed-relief-camps/story-uk6awO5zDxZoWKkFdRHvsK.html

https://www.deccanherald.com/national/east-and-northeast/assembly-polls-2021-assam-politics-tryst-with-religion-and-language-965823.html

https://www.unicef.org/india/where-we-work/assam

https://www.indiatoday.in/mail-today/story/assam-floods-lady-birth-boat-relief-camp-332509-2016-08-01

http://projects.aljazeera.com/2014/child-marriage/india.html

https://nenow.in/north-east-news/assam/breather-for-assams-flood-hit-lactating-women-as-they-get-breastfeeding-corner-at-relief-camp.html

https://peeschute.com/

Thank you!