



ग्लोबल वॉर्मिंग

CLIMATE SAKHIS

GENDER BASED CLIMATE CHANGE RESILIENCE INITIATIVE

PROJECT REPORT:
APRIL 1ST TO 15TH OCTOBER, 2022

ICONIQ


environmental research and action group





WHY THIS PROJECT

Climate change refers to long-term shifts in temperatures and weather patterns. This can have an adverse impact on lives of communities across the world. The impacts of the crisis are disproportionately felt across the spectrum of the human population depending upon the socio-economic categories such as gender, class, race, caste, ethnicity etc. In general, the poor experience the harshest impacts of climate change, particularly in the developing world. The climate crisis is not 'gender neutral', as women and girls are often the hardest hit amongst the poor. Any crisis or scarcities, such as those created by climate change, amplify existing gender inequalities. These also poses unique threats to their livelihoods, health, and safety. Women are more vulnerable to the effects of climate change than men as they constitute the majority of the world's poor, juggle child rearing and home keeping with work and are often forced to undertake the most menial and challenging tasks. Furthermore, they face social, economic, and political barriers that limit their coping capacity. Women in developing countries are especially vulnerable when they are highly dependent on local natural resources for their livelihood apart from the responsibility to secure water, food and fuel for cooking and heating face the greatest challenges. Secondly, when coupled with unequal access to resources and to decision-making processes, limited mobility limits women agency. To address this gender injustice, it is important to identify gender-led strategies to respond to the environmental and humanitarian crises caused by climate change.

In India climate change also leads to poorer nutrition and health, there are three crucial drivers of malnutrition in women. Skipping meals to feed other family members in times of hunger; having to travel longer distances for water and fuel; and lack of access to productive resources and assets. Studies have shown that about 51 percent of Indian women of reproductive age (15 to 49 years) are anaemic.

Living in a slum exacerbates the impact of climate change. The poor consume significantly less. Sometimes their work mitigates climate change for the middle classes. Yet, they bear the greatest brunt. Studies indicate that the lack of quality infrastructure impacts health adversely. Women, who spend more time in the slum, suffer from allergy problems, the reasons for which are generally waste accumulation in the surrounding areas, no proper sanitation system, and waterlogged drains which are mosquito breeding spots. Many urban poor do not have access to clean cooking fuel, and are forced to use biomass. This causes intense air pollution, impacting the health of women and infants more than any other segment of the population. Another crisis is rain. Even where a drainage system exists, intense and excess rain creates waterlogging as it more than the handling capacity of the system. This causes sanitation crises, makes it almost impossible to draw underground water and becomes a cesspool for diseases. Houses can collapse and force women to be even more vulnerable. Therefore, the conditions of a slum force the poor into climate-induced poverty.



Climate Sakhis enables appropriate women-led adaptation to key climate change impacts in Kusumpur Pahari slum. It identifies innovative, science-based responses to climate change impacts. It also supports local women leaders to mobilize and implement solutions that will reduce their vulnerability to heat waves, intense rain, and air pollution, through technical, behavioural, and systemic shifts.



“I am an old person, I remember that earlier all the women used to join hands together, we would do things together, coat our walks with mud and stay cool and do things that were told in our villages. Now a days women don't work together and suffers alone. If we come together and do things together our lives would be better. We are willing to do this.”

Ramdhani Devi, 60, resident of Kusumpur Pahari



PROJECT LOCATION



KUSUMPUR PAHADI



The term 'pahadi' or hillock, refers to the geographically elevated position of the slum because it is located on a ridge of the Aravalli mountains, one of the oldest mountain ranges in the world. Kusumpur Pahadi is a notified slum located in the residential area of Vasant Vihar of New Delhi with a dense population spread over 0.17 square kilometres. The settlement is situated on land that is owned by the Delhi Development Authority (DDA). The DDA is a planning authority responsible for planning, development and construction of housing projects, commercial lands, land management as well as providing public facilities like roads, bridges, drains etc.



DEMOGRAPHICS

In this section we have used data from the 2011 census-the latest available census data from the Government of India. Kusumpur Pahari has a population of 17,028 of which 53% of the residents are male while 47% are female. It is reported to have the lowest literacy rate in the city at 72.68%. The male literacy rate in Kusumpur is around 82.68% while the female literacy rate is much lower, at the astounding rate of 60.93%.

The residents work as sanitation workers, street vendors, auto rickshaw drivers, manual labourers, domestic workers and waste workers etc. Most women work only part time, mostly in the area of waste. According to the census data, 58.49% of the inhabitants of Kusumpur Pahari are Dalits, (Scheduled Caste), the most marginal of all groups in India. The inhabitants belong largely to five caste groups: Valmiki, Raigar, Khatik, Bairwa and Orh.

The Valmiki's traditional occupations are sweeping and removing excrement (sometimes using their bare hands) from villages and cities. They form the largest percentage of Dalits in Delhi. The Berwas are Dalits from the Indian states of Rajasthan, Madhya Pradesh, and Delhi. They fall under farmer sub-group 'defiled occupations' associated with farming. The Raigar traditionally handled carcasses for dyeing or tanning leather. Most Raigars are landless workers. The Khatik's main occupation is working as butchers. Orh, also known as Oad, Odh, is a nomadic tribe of laborers in Gujarat, Kathiawar, and some parts of Rajasthan in North-western India.

As a result of their traditional occupations, these communities have faced stigma for centuries and therefore are among the most marginalized sections of society.

INFRASTRUCTURE

Kusumpur Pahari is nestled amongst India's most privileged areas such as the residential Vasant Vihar, one of the sought-after residential areas in the country, Jawaharlal Nehru University (JNU) - one of India's most prestigious universities, expensive office areas and malls. The slum is marked by extraordinary deprivation as the surrounding areas have ploughed out enormous resources such as water and have contaminated the air. Kusumpur Pahari is an underserved area whose residents serve the expensive real estate that lies in its proximity.

Kusumpur Pahari comprises 5 blocks- A through E-clustered by caste and occupation. Most houses are permanent pucca settlements or houses made from crude cement and bricks using intuitive design and architecture. The permanent houses which are two storied and three storied, unsafe and incrementally built over the years. Many pockets comprise houses built of tin and tarpaulin. Housing with these materials results in extreme heat during summers, severe cold during the winters and sometimes leakage during heavy rains.

Kusumpur Pahari faces acute water shortage as no running water is provided. The neighbourhood has already drawn-out water using electrical pumps, making it difficult for the residents here to dig or draw out well water. The settlement faces frequent water shortages, only partially addressed by water tankers and some handpump provisioning.

APPROACH

Chintan's key approach under Climate Sakhis is based on the following pillars

- 1** BUILDING WOMEN'S UNDERSTANDING OF CLIMATE CHANGE AND ITS IMPACT ON THEM
- 2** EMPOWERING WOMEN AND BUILDING THEIR LEADERSHIP TO MOBILIZE AND IDENTIFY COLLECTIVE SOLUTIONS TO ADAPT TO CLIMATE CHANGE
- 3** USE SCIENCE AND LOW-TECH TO FIND LONG LASTING SOLUTIONS
- 4** ENCOURAGE THE YOUTH TO GET INVOLVED IN THE INITIATIVE SO THEY CAN SUPPORT THE WORK OF THEIR POORLY LITERATE OR ILLITERATE MOTHERS
- 5** CREATE STRATEGIC PARTNERSHIPS TO BRING IN THE BEST IDEAS AND ACTORS
- 6** STORYTELLING AS WOMEN'S VOICE



WHAT HAVE WE DONE SO FAR?

A BASELINE SURVEY

METHODOLOGY

Chintan commissioned Frametrics Consultancy Pvt Ltd to undertake a baseline study to guide the work ahead. The results of the baseline were expected to guide the training and capacity as well as identify the partners based on the needs. A baseline also helps us gauge the extent of community knowledge and build it up.

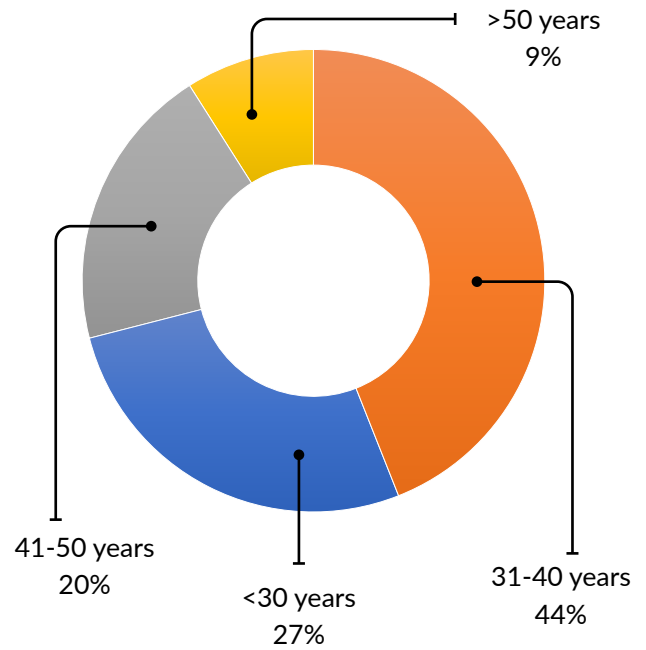
Frametrics Consultancy Pvt Ltd was chosen based on Chintan's experience with 3 environmental consultants and their familiarity with climate change and slums, as both these aspects were important to the quality of the survey.

This study interviews 510 respondents of the Kusumpur Pahari area of Delhi in May-June 2022 to assess the linkage between the impact and experience of climate change for women in the metropolis. The Jhuggi Jhopri Cluster (JJC) lacks urban infrastructure like access to piped water and toilets. Women already face regular harassment around open defecation and domestic violence is also prevalent. In the backdrop of this women were asked about the impact of climate change in their lives. The process was as follows:

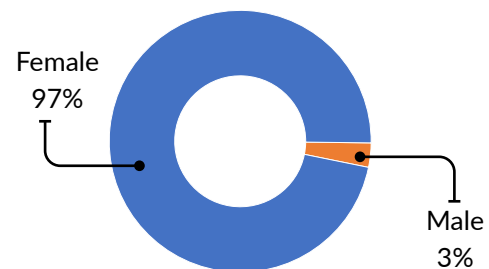
- Undertaking a recce of the slum to understand the number of households and its boundaries
- Making a note of the infrastructure, shops, and facilities available to understand possible aspects to include in the baseline via 3 walks in the area
- Identifying diverse areas and therefore, the stratification sampling via information from youth
- Testing the first survey instrument with 50 persons
- Adjusting it based on glitches
- Undertaking the entire survey
- Analysing the data and brainstorming with Chintan to identify crosstabs to analyse
- Completing the baseline

While the intense heat waves slowed the process, the results and recommendations were used to develop the training modules and interactive aspects of these.

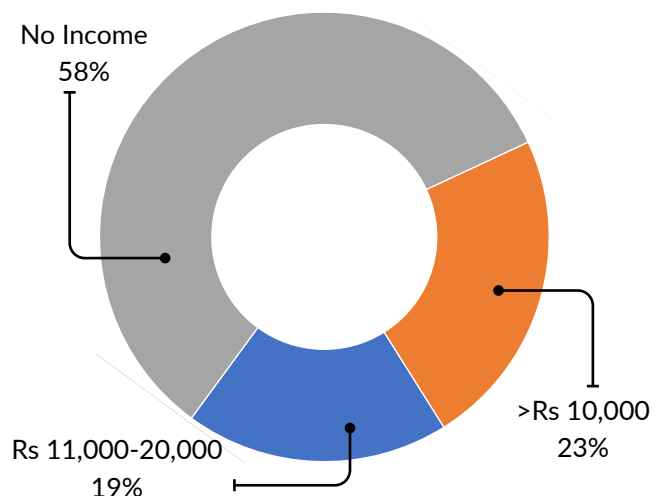
AGE PROFILE OF RESPONDENTS



GENDER PROFILE OF RESPONDENTS



INCOME PROFILE OF RESPONDENTS



HIGHLIGHT OF BASELINE SURVEY RESULT

- Only **7%** respondents were heads of households (**3%** sample was men)
- **42%** respondents were employed
- **34%** had spent additionally on healthcare in the last three months. Infact, 46% reported an increase in incidence of diseases
- **22%** respondents noticed a change in their native village climate. Yet, **86%** of all respondents did not think climate change impacted them in anyway. Therefore, there were at least **6%** respondents who noticed a change in the climate of their native village but thought they were immune to the impact of climate change in general. Their perception remained specific to the events in their native village.
- **82%** women were primary care givers. Yet, the linkages between health and climate events were not evident. **43%** women who noticed erratic rain did not think anyone in their family was vulnerable to it. Similarly, **32%** of the women who noticed and increased in air pollution felt no one in their family was vulnerable to it.
- The impact of climate change on household income was very clear. Seventy Four percent of the respondents who perceived change in rain patterns thought it impacted household income while **43%** of the same people thought no one in their family was vulnerable. So at least **17%** respondents who perceived an impact on household income did not perceive it on the health of their family.
- But impact of climate change on health of household was not very clear. **78%** of the respondents surveyed felt that increase in illness of household members impacts income. But the link between disease and climate change was found missing.



Therefore, if women were to be trained on the impact of climate change, their participation on response to climate change is bound to increase.
A real representation of how much of their time and effort is spent dealing with the outcomes of climate change and how it impedes the working members of their families from working to their full potential is likely to create empowerment for the complete community.

[Detail result can be found here](#)



A photograph of two women in a slum setting. The woman on the left, wearing a yellow patterned sari, is gesturing with her hand while talking to the woman on the right. The woman on the right, wearing a red patterned sari and an orange headscarf, is holding a young child. They are standing on a dirt path with buildings and other people in the background.

WHAT HAVE WE DONE SO FAR?

MOBILISING WOMEN TO ACT AS A COMMUNITY

Chintan mobilized women to help them shift from being individuals to an active collective over the duration of the project. The term 'Climate Sakhis' implied women's friendship and solidarity in the face of climate change. Key aspects of mobilization were:

- The team walked around the slum at about noon and 4 pm, when women were least occupied. They knocked at doors and asked them about the heat and the issues, using this as an opportunity to explain the project. A total of 1200 women were met.
- A cohort of 5 women of the most active and interested volunteers was brought together to expand further engagement in the area. These formed the core of the local leadership.
- Thereafter Chintan mobilized 1000 women between the age group of 18 to 65 years who showed keen interest in engaging as Climate Sakhis. The project will work with this cohort for the next 6 months.

[A list is of identified Climate Sakhis is here](#)



WHAT HAVE WE DONE SO FAR?

DEVELOPING STRATEGIC PARTNERSHIPS

For building climate change resilience at Kusumpur Pahari, Chintan began developing partnerships with leading organisations that would help us bridge the key gaps identified. The partners are as follows:

SUSTAINABLE ENVIRONMENT AND ECOLOGICAL DEVELOPMENT SOCIETY (SEEDS)

SEEDS will work with Chintan to do the following:

- Work on identify the most heat-vulnerable homes and low-cost technical solutions to these
- Help set up an air pollution laboratory either in a nearby municipal school or the slum itself for youth to use to help their (illiterate) mothers to act on air pollution
- Seek architectural solutions to reduce heat in the over slum

CLIMATE ACTION NETWORK SOUTH ASIA (CANSA)

CANSA is the leading civil society coalition for Climate change in South Asia. CANSA will do the following

- Advise, guide, and provide support on global climate change negotiations and policies as relevant to the project
- Share best practices ideas and resources to achieve desired results.
- Advise on the risks and suggesting any remedial or corrective actions on site

DAMAGE CONTROL CONSULTANCY

Damage control Consultancy is pioneer communications agency working on climate change in India. It will do the following:

- Create trainings modules about climate that are relevant in Indian context and deliver 4 of them.
- Train the Chintan team to deliver them
- Devise strategies to communicate by the women.
- Identify trainings requires to boost knowledge and awareness about aspects of climate change that might impact the women at the ground.

DELHI POLLUTION CONTROL COMMITTEE (DPCC)

The DPCC is the key regulator for pollution in Delhi. The DPCC will do the following:

- Shoot videos by its scientists working on air pollution to share information with the Climate Sakhis. Due to the severe pollution, it may be hard for them to visit any area as they are under court orders to monitor sources for the fall and winter.
- Help launch a challenge around addressing air pollution solutions in Kusumpur Pahari and identifying the best solution
- Help with technical inputs for a training on construction and dust and preventing exposure.

WHAT HAVE WE DONE SO FAR?

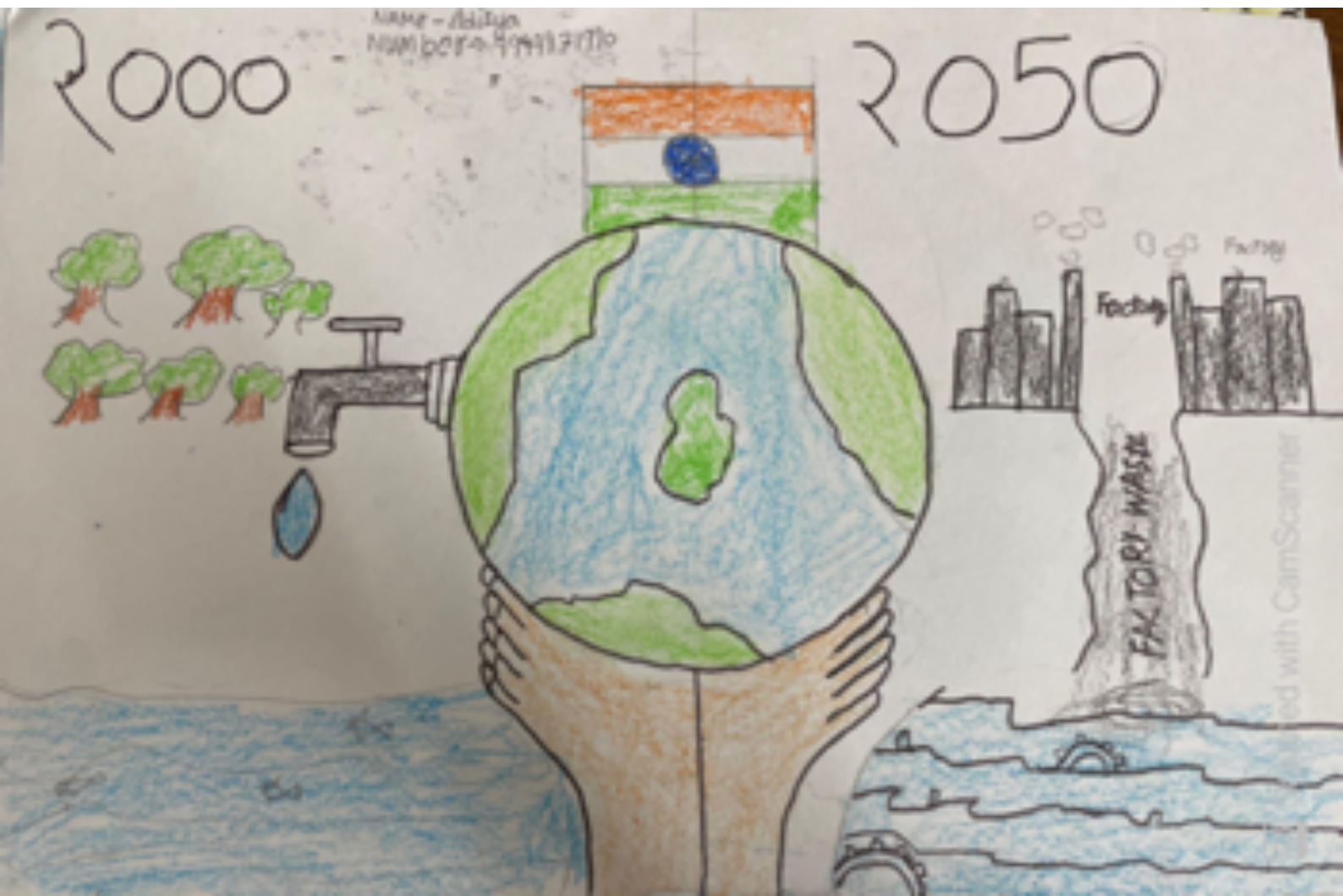
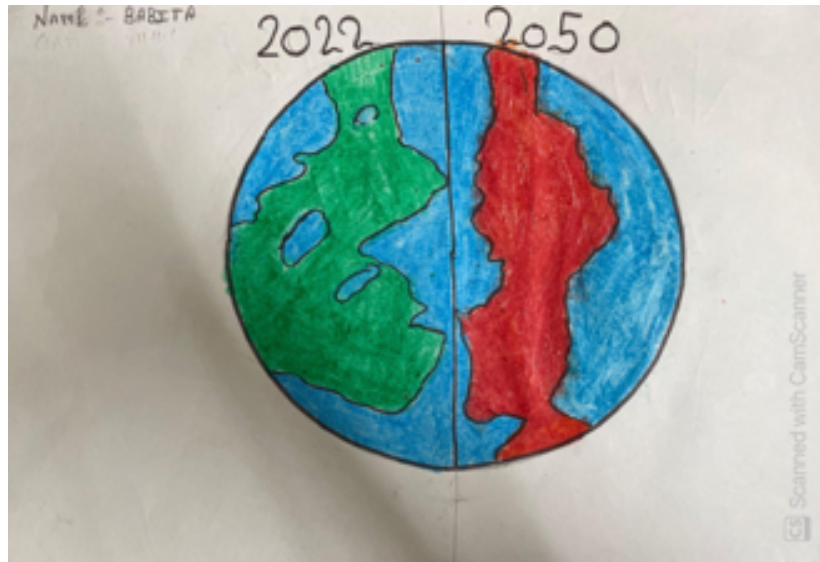
CAPACITY BUILDING

UNDERSTANDING CLIMATE CHANGE AND ITS IMPACT ON THE GROUND

A training was created, tested, and modified to explain the idea of climate change and the impacts it can have on the women's lives, health, and financial status. It linked the larger shifts with local phenomenon such as heat waves, cold waves, extreme rainfall, floods, and droughts. The module also stressed on the part that even though participants have emitted less CO₂ compared to others they are bearing the brunt of climate change. The trainings also stressed on what they can do to adapt to climate disasters. A total of 910 women were trained across 12 workshops.



After the workshops, **an art activity was undertaken** with 50 children accompanying the women to identify how many understood the issue and were likely to be able to support their mothers to make change.



UNDERSTANDING AIR POLLUTION AND ITS IMPACT ON THE GROUND

Delhi is one of the world's most polluted cities in the world. In 2022, Delhi experienced its first pollution free day only in September. Intense Air Pollution (where AQI enters the danger zone) in Delhi begins anytime between October and November, lasting till March. Climate change and air pollution are often understood as two sides of the same coin. It is for this reason that capacity building for this issue. The timing was to help impact the women during the worst months. The emphasis was on the health impacts of air pollution on the lives of women and children. The module also stressed on Air Quality index (AQI) and warning indicators and protocols. A total of 502 women were trained across 7 workshops.

A follow up activity on AQI was done to help women understand the level of severity of Air pollution in their area.



“We knew that when a lot of smoke goes inside our body, we obviously fall sick. Where they come from, what types of smoke of smoke they are, what they do to us, what we should do to stop it now with all this you have to help us with, and you must teach us what to do. That’s why we want to work with you.”

Tara, 27, resident, Kusumpur Pahari

[All the presentations used for training can be found here](#)



असमानता

जलवायु परिवर्तन

जिसने न्यूनतम समस्या पैदा की,
वह सबसे ज्यादा पीड़ित है

“You are telling us about climate change, we have never heard of this thing before, we did not know that such a dangerous thing existed and it was a cause of so much heat and our problems, please tell us more.”

Alka, 25, residents of Kusumpur Pahari



WAY FORWARD

Chintan will continue to build on the work done till now for the next 6 months, focussed on:

- Boosting women's leadership to raise key issues and increase attention on their condition
- Science based action on the ground directly and through technical partnerships
- Partnerships for tangible solutions that women can embrace through challenges and directly
- Storytelling and building community

An important part of the work will be to seek more and more alliances from institutions and actors in the local region, helping to create empathy and support for the women in Kusumpur Pahadi. This will also make the inputs more sustainable and address, in part, the issue of being an island of poverty in a sea of wealth.

क्लाइमेट सखी



KUSUSMPUR PAHADI