

# AN ANALYSIS OF CLIMATE JUSTICE FOR THE URBAN POOR IN BHUJ CITY

Prepared by Sheeva Y. Dubey  
For **Homes in the City (HIC)**  
Bhuj, Gujarat. March 2024

- ✓ **Justice** is concerned with setting out the moral or legal principles of fairness and equity in the way people are treated, often based on the ethics and values of society.
- ✓ **Social justice** comprises just or fair relations within society that seek to address the distribution of wealth, access to resources, opportunity and support according to principles of justice and fairness.
- ✓ **Climate justice** comprises justice that links development and human rights to achieve a human-centred approach to addressing climate change, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly.

(IPCC, 2022, p. SPM-5, p. 2913)

A study was conducted by HIC from September 2022 till March 2024 to assess the status of climate justice for the urban poor in Bhuj City. The study was conducted in **three phases**. In the **first phase**, a climate justice framework for the urban poor was developed adapting from some key international frameworks. The **second phase** included mapping this framework to the current policies in India and the provisions in them for the urban poor. During the **third phase**, we went out to the urban poor communities in Bhuj city and assessed their access to the public policy and provisions needed to cope with climate change impacts fairly. For the assessment of the living conditions of the informal settlement dwellers, the study has been conducted in Ashapura Nagar, Bhuteshwar Nagar, and Sanjog Nagar. For the assessment of work conditions of informal workers, daily-wage construction workers, street vendors, and waste pickers of Bhuj city have been approached. This primary study which consisted of both quantitative and qualitative components allowed us to compare our findings from the second phase with the ground realities experienced by the urban poor communities.

## Operationalised adapted framework of climate justice

### Part I: Recognitional justice

Component	For public policy review	For community-based assessment
a. Climate-related vulnerabilities	The communities and population groups identified by the government as highly vulnerable to climate change effects	The population groups among the target communities that are experiencing high impact of climate change
b. Climate action vulnerabilities	The communities and population groups identified by the government as vulnerable to the proposed and ongoing climate action	Any proposed/ongoing climate action approved by the government that is negatively affecting target communities (if any)
c. Pre-existing and historical disadvantages	The communities and population groups identified by the government as highly vulnerable to climate change effects due to their pre-existing and historical disadvantages	i. The communities and population groups that are highly vulnerable to climate change effects due to their pre-existing and historical disadvantages ii. The nature of their disadvantages

d. Local cultures, IK and LK	The local cultural practices, IK, and LK acknowledged by the government in context of climate change	The local cultural practices, IK, LK, and narratives of target communities instrumental in coping with climate change (or hindering with adaptation for climate change)
------------------------------	--	---

### Part II: Distributive justice

Component	For public policy review	For community-based assessment
a. Needs	The needs of identified vulnerable communities for climate resilience that are being ensured by the government in policy	i. The needs and dependencies of target communities for climate resilience ii. The extent to which the needs assured by the government are being met
b. Resources	i. The resources allocated by the government to the identified vulnerable communities to build their climate resilience ii. The proportion of these resources in comparison with the rest of allocations and the priorities set by the government	i. The adequacy of the promised resources in helping communities build climate resilience ii. The extent to which the promised resources are received or accessible by community members (if any)
c. Rights / Entitlements	The rights and entitlements assured by the government to the identified vulnerable communities to build their climate resilience, protect from the cost of climate action, and benefit from it	i. The promised rights and entitlements received by community members (if any) ii. Other rights and entitlements needed by communities but not acknowledged by the government
d. Responsibilities	The entities held responsible to ensure the needs, resources, rights, and entitlements of the identified vulnerable communities	The ability of community members to hold the responsible entities accountable and access their needs, resources, rights, and entitlements promised by the government

### Part III: Procedural justice

Component	For public policy review	For community-based assessment
a. Transparency / information shared	The extent, clarity and frequency of information shared by the government on their climate policy and action	The extent of information on government policy and action accessible, legible, and useful to community members
b. Accountability / responsibilities in processes	i. Clarity of assignment of responsibilities and information about the responsible authorities ii. The availability of responsible authorities, their willingness to share requested details, and act on appeals or complaints	The ability of community members to approach responsible authorities, get the needed details, and the needed action in time
c. Fairness to all stakeholders	Whether the government rules and procedures are common for all and ensure equality among all stakeholders	Whether community members find themselves to be treated equally and feel able to participate in government processes
d. Inclusive and representative participation	The representation of the identified vulnerable communities in government processes related to climate policy and action	The extent of presence of community members in government processes
e. Right to participation and decision-making / legitimacy	Whether the identified vulnerable communities are granted a right to participate in the decision-making processes by the government	Whether the community members are able to access their right to participate in government's decision-making (if granted any)

f. Feasibility of participation	Whether the government rules and procedures provide enough time, opportunity, and affordability to all stakeholders for fair participation	The ease with which community members can participate in government processes
g. Outcome of process	The extent to which the government policy and action have been helpful to the identified vulnerable communities build their climate resilience	The extent to which community members have been able to achieve their desired result from the government policy and action

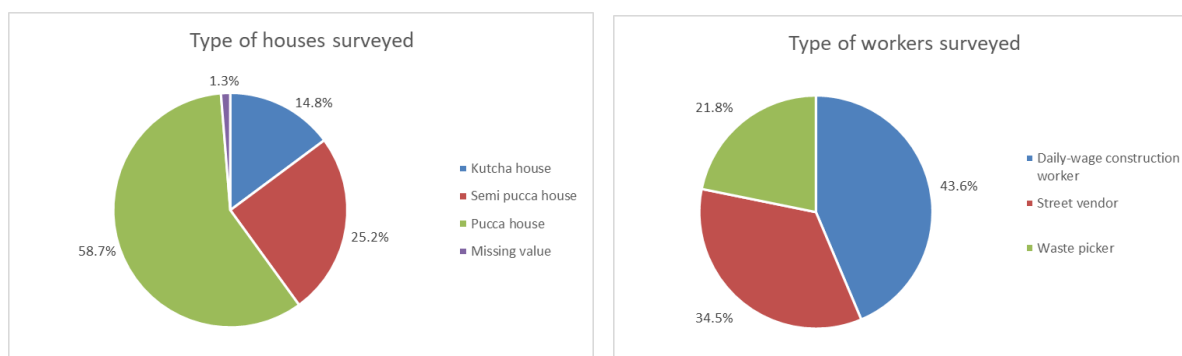
The main **climate risks** identified for Bhuj city include heat stress, water scarcity, and floods and cyclones. In addition to focusing on these climate risks, the study also focuses on some specific challenges faced by the urban poor: a) **housing** related vulnerabilities, b) **livelihood** risks and vulnerabilities, c) **water and sanitation** related vulnerabilities, d) **food** insecurity, e) **health**, and f) **migration**. For each of these vulnerabilities, the framework mapping was done to assess policy provisions as well as grassroots conditions.

## I. CLIMATE RISKS

### Policy analysis

Policies and action plans on climate change and disaster management were primarily reviewed for this section. The disaster management policy acknowledges local communities as “first responders to disasters” and provides for their inclusion in disaster management process. The policy also aims to cover the losses in livelihood incurred due to disasters. A 2020 Gujarat State action plan on heatwaves aims to improve awareness among outdoor manual workers and their employers. Setting up early warning systems and shelters are also mentioned in the disaster management policy. However, in the climate change policies, action plans and funding, no attention is paid to the needs of the urban poor.

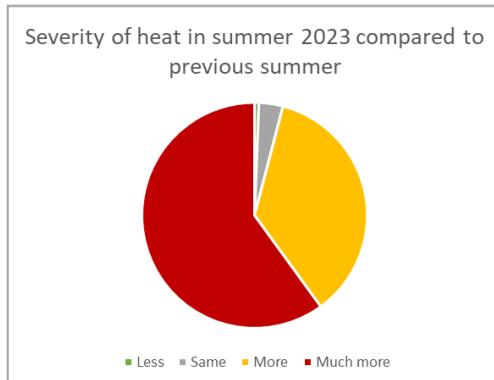
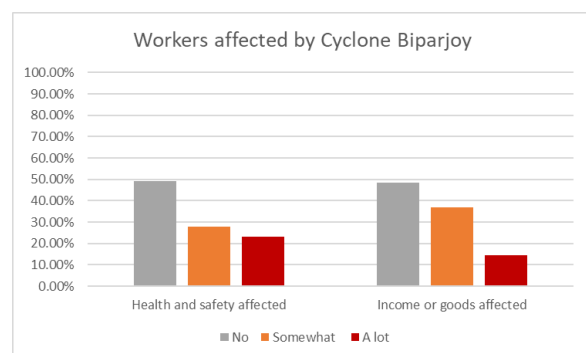
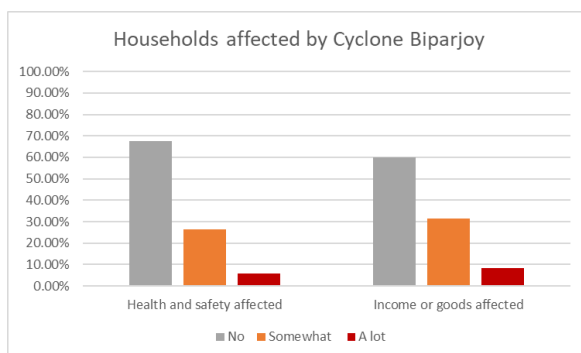
### Field observations



A total of 320 people were surveyed. 155 households were surveyed among low-income settlements in 7 different areas and wards of Bhuj city. Additionally, 165 workers were surveyed out of which 72 were daily-wage construction workers, 57 were street vendors, and 36 were waste pickers. 57% of the household survey respondents and 27% of the workers survey respondents were females. The average age of respondents of household survey was 48 years and of workers survey was 36 years. Additionally, a total of 6 focus group discussions were conducted, 3 in low-income housing settlements and 3 with informal workers including daily-wage construction workers, street vendors, and waste pickers. In addition, a few interviews were conducted with community leaders, social workers, government officers.

**Biparjoy Cyclone** was most recent in the memories of the local people when we conducted the study. In the housing survey, in total 32.3% households reported that their health and safety were affected

by Cyclone Biparjoy, among which 6% respondents reported being affected a lot. Also, 40% survey respondents shared that their property, belongings or income were also affected in some way due to the cyclone, among which 8.4% respondents said that the financial impact for them was a lot. Among the workers surveyed, 50.9% respondents reported their health and safety being affected by Cyclone Biparjoy, out of which 23% said that their health and safety was affected a lot. Additionally, 51.5% workers said that their work, income, belongings, or goods were affected in some way or other, of which 14.5% reported these being highly impacted. Among these were primarily daily-wage workers and street vendors that sold perishable items. 98.7% of the respondents of the household survey and 86.7% workers reported that they did not receive any relief/assistance from the government to cope with the losses from Cyclone Biparjoy. Only those living in kutchha houses were taken to shelters during Biparjoy Cyclone and given INR 500 each per day for lost wages. The community members reported that no loss and damage assessment was done in their communities while the government officials reported having completed their assessment.



The **heat in 2023 summer** was another major concern shared by community members. Among the total 320 respondents of the two surveys, 35.9% reported that this summer was more severe in terms of heat compared to the previous summer, while 60% respondents felt that it was much more severe. Among the household respondents, a total of 60.6% shared that their or their family members' health was affected during this summer. Among the workers surveyed, 46.6% faced impact on health due to heat stress this summer. A total of 49.7% of

household respondents and 47.2% workers shared that their savings or income were affected due to the impact of heat stress. Among the surveyed workers, 77% reported that they were unable to change their work hours to avoid the heat stress. 98.1% of the respondents of household survey and 99.4% of the surveyed workers reported receiving no assistance from the government to cope with heat stress during the summer. 80.6% of the total 320 respondents also shared that they do not get any advance warning related to weather. Lack of information and awareness of their rights were the biggest barriers in accessing participation in government processes.

### Key gaps identified

1. Community members have been acknowledged as first responders in the National Disaster Management Policy 2019. However, this does not reflect in the state level and local level plans. As a result, community members have not been trained in disaster preparedness and response. The state government's Aapda Mitra programme under which a few select people are trained is not sufficient.

2. The study results show that Cyclone Biparjoy affected the health, safety, income, and goods of workers more than that of households. Street vendors were among the most affected. This highlights the vulnerability of informal workers to disasters. However, the disaster management policy does not acknowledge workers as a vulnerable category and has no provisions for their security. During Cyclone Biparjoy, the compensation was provided based on housing condition only.
3. Heat stress is increasing every year while the local government is taking no action towards improving awareness and preparedness to protect outdoor workers and residents of inadequate housing. Women and people with disability, construction workers, and kutcha house residents are the most affected.
4. While temporary shelters were made available during Cyclone Biparjoy, no cooling shelters are available to the people in Bhuj city. Informal housing residents also had no support for installation of cool roofs.
5. The loss and damage assessment post Cyclone Biparjoy was done without any knowledge of local communities. The criteria of assessment of damage to houses were also not known to people.
6. The study participants shared lapses in post-disaster restoration and rehabilitation measures taken after Cyclone Biparjoy. There were cases of electricity connection not restored in time, water supply not ensured, and no provisions for food to the people who lost everything in the Cyclone. Kutcha house residents faced most losses.
7. No community participation was happening in disaster preparedness or heat action. The study participants were completely unaware of the government policies and planned actions. The policy recommends that vulnerable communities should be made aware about their vulnerabilities. However, no such awareness existed in study participants of their disaster vulnerabilities. Also, in absence of citizen participation, reportedly no community in Bhuj city has been recognised as vulnerable.

### Recommendations

1. Disaster preparedness and response training should be done in all formal and informal urban poor communities. Early warning systems should be put in place. A special attention is needed for women, elderly and people with disability.
2. **Disaster management policy should be revised to acknowledge informal workers as vulnerable groups and incorporate provisions for improving their disaster resilience.** In case of loss of daily wage, compensation should be provided to all categories of informal work.
3. Immediate attention is needed for heat stress awareness and preparedness in Bhuj for outdoor workers and residents of inadequate housing. Community awareness is needed to be built and accessible treatment needs to be ensured. Employers of construction workers should be better regulated to follow government norms and advisories, as specified in the Gujarat State Action Plan on Heat Waves, 2020. Special attention is needed towards women and people with disability.
4. **Cooling shelters** should be created and made accessible to outdoor workers and residents of inadequate housing at all times during the months of high heat and humidity in the city. Government initiative is needed for promotion of **cool roofs** and making them accessible for the informal housing residents.
5. The assessment of loss and damage post disaster should be done in a transparent manner and participation of local communities should be mandated in the assessment teams.
6. Post-disaster restoration and rehabilitation should also be taken seriously and completed in a timely manner. Responsible authorities should be held accountable.

7. Citizen participation should be prioritized in disaster preparedness and heat action, as policy mandates, to make them self-dependent and more resilient.

## II. HOUSING-RELATED VULNERABILITIES

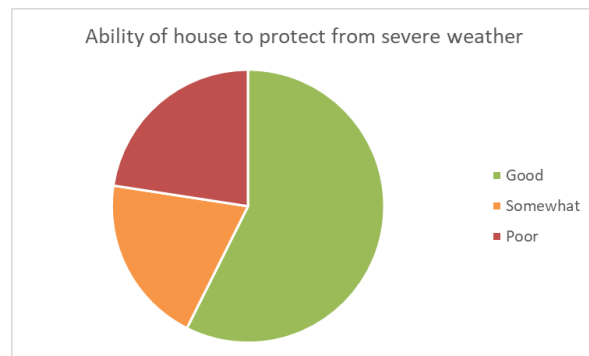
### Policy analysis

Housing-related policies were also reviewed. It is found that in the policies on climate change, sustainable housing, and smart cities, the consideration of informal housing is entirely missing. As a result, the discourse on climate resilient housing is mainly focussed on the formal housing sector while most vulnerabilities are experienced by the informal housing residents. Disaster management plans also shy away from clearly addressing the vulnerabilities of informal housing residents. On the other hand, the policies on affordable housing are silent on climate change and heat resilience that are much needed. In conclusion, there are no policies in place to address the housing-related vulnerabilities of the urban poor to climate change.

### Field observations

Only 57.4% of the households surveyed reported having houses that can protect them from severe weather conditions. 20% respondents shared that their houses can only somewhat protect them and another 22.6% respondents shared that their houses are poor at protecting them from severe weather conditions. The most vulnerable were

**kutcha houses**. Almost 93% of the household survey respondents shared that they received no government funding for construction or reconstruction of their houses. Only 7.1% respondents reported getting partial government funding for the same.



*“My hut was blown away by the cyclone. It was broken. The roof was gone, there was nothing at the top. Everything from the kitchen was also gone. Nothing was left. Everything was gone.”*

Majority of the study participants shared struggling because of lack of **basic amenities** in their localities. In multiple localities, the waterlogging was a frequent problem which also resulted in a big issue of mosquitoes and flies, affecting residents’ health. Lack of electricity in the houses of waste pickers added to their difficulties faced due to heat. Overall, there was a sense of frustration among study participants when it came to getting the desired outcome from government processes. 77.4% respondents shared that they were not aware of the responsible government authorities and offices for the schemes they wanted to avail. Only 14.8% respondents were aware of these details and another 7.1% respondents shared that they knew the details only in some cases. On being asked about their housing-related needs so as to build their climate resilience, most community members asked for **housing security**.

### Key gaps identified

1. A stark gap in the national climate change policy on housing called National Mission of Sustainable Habitat is its exclusion of informal housing. The same blind spot exists in the Gujarat State Action Plan on Climate Change 2021. As a result, no government initiatives and funding are directed towards improving the highly vulnerable inadequate housing of the urban poor. The National Mission of Sustainable Habitat is also devoid of the idea of climate justice towards the urban poor in an effort to create or restore green spaces.

2. Government schemes for housing for the poor such as PMAY-U and Mukhya Mantri GRUH Yojana do not have provisions to encourage climate resilient house construction. The settlements highly vulnerable to disasters and climate change have no provision for prioritised assistance under the schemes.
3. **Absence of land tenure is leaving the informal housing residents unable to improve their housing infrastructure and thereby climate and disaster resilience.** The constant threat of eviction is hindering their efforts. In addition, municipality also does not pay attention for providing basic needs and services to informal housing settlements. Kutch house residents are the greatest victim of housing insecurity and resulting vulnerability to climate change and disaster.
4. The government depends on mass communication channels such as newspapers, websites or mobile apps or messages for promotion of schemes and policies for the urban poor. Schemes and policies are not promoted directly in informal housing settlements, rendering the residents highly unaware of their entitlements. Women who also have least literacy levels and access to mobile phones are among the least aware of government policies and schemes.
5. The informal housing residents are unaware of Ward Sabha and their right to participate.

### Recommendations

1. **Informal housing, especially kutch houses, being the most vulnerable and housing a large section of vulnerable population should be at the centre of attention for government's climate change adaptation policy and measures related to housing.**
2. PMAY-U and Mukhya Mantri GRUH Yojana should be revised to prioritise and increase assistance to settlements identified as vulnerable to disasters and climate change. The policies also need change to ensure the adoption of heat-resilient roofing and appropriate ventilation in hot areas such as Bhuj city.
3. Informal housing residents should be granted land tenures so that they can invest in better housing infrastructure, get better access to basic needs and services, and thereby improve their climate resilience.
4. Government policies and schemes need more promotion and awareness building in informal housing settlements. The government officials should visit communities instead of depending on indirect communication channels such as websites, mobile apps or messages, or newspaper advertisements. Reaching out to women should be prioritised.
5. Awareness drives are needed among informal housing residents about local Ward Sabhas and their right to attend and participate in Ward meetings.

## III. LIVELIHOOD RISKS AND VULNERABILITES

### Policy analysis

In this section, the laws and policies on labour rights, occupational safety, social security, welfare boards, and skills training. The common perception is to regard the rural livelihoods to be more sensitive to climate change impacts. As a result, there is no recognition of the vulnerabilities to urban livelihoods due to climate change in policy. The policies focusing on urban livelihoods such as NULM and policy on workplace safety carry the same blindness to the climate change impact on urban livelihoods.

### Field observations

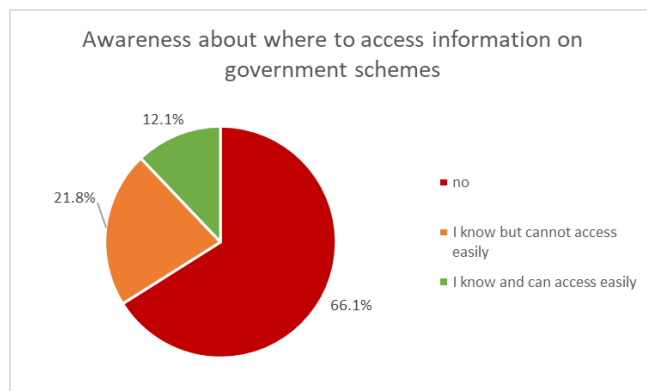
Among all the workers we spoke with, waste pickers faced most losses due to **Biparjoy Cyclone**. Their kutch houses were flimsier than that of construction workers and were damaged to a large extent. In addition, the collected waste for recycling that is mostly stored around their houses in open was

also gone due to the cyclone. Street vendors were also among the most affected by Cyclone Biparjoy because of loss of their goods or damage to their shops. Ordinary rains also created problem for informal workers in terms of loss of work opportunities, customers, and damage to goods. All but one worker reported that no compensation was received from the government in case of loss of income due to any disaster and associated economic crisis.

*“We cannot help it but fall sick due to heat.”* Heat in the 2023 summer was also a major concern for almost all workers. Be it construction workers, waste pickers, or street vendors, they reported being unable to adjust their work timings much to avoid hot hours.

Among the workers, 43.6% have some kind of license, registration or recognition from the government as workers. 47.3% workers were not recognised by the government as workers and therefore remained out of the purview of government schemes and benefits. 7.9% workers shared that they were awaiting approvals. When asked whether any initiatives were taken by the government to improve their work environment including the physical infrastructure, 90.3% workers responded in negative. Getting credit, insurance, and skill development opportunities were other challenges mentioned. Construction workers also found it challenging to get compensation in cases of injury at work sites.

Majority of workers, 66.1% of them, shared that they did not know where to get information from on the government schemes they are eligible for and the ones they have applied for. Another 21.8% workers shared that they knew where to get the information from but it is not easily accessible for them. Only 12.1% workers shared that they knew where to get



information from and that it was easily accessible for them. Most respondents, 96.4%, were also not aware of the responsible government authorities and offices for the schemes they wanted to avail. Most workers, 97.6% of them, did not receive regular communication of updates and information on the government schemes they had availed. Also, most workers surveyed (98.8%) shared that they did not get any opportunity to participate in the implementation of any government scheme or program.

### Key gaps identified

1. The National Action Plan on Climate Change (NAPCC), 2008 does not acknowledge informal workers as a vulnerable category of population to climate change. As a result, climate change policies have no focused attention to addressing the impact on and improving the resilience of informal workers. On the other hand, the Occupational Safety, Health and Working Conditions Code 2020 does not acknowledge climate change as a risk or threat and therefore has no provisions for protection of workers from severe or extreme climate conditions.
2. Disaster Management policy also does not pay attention to urban informal workers. As a result, the loss and damage of informal workers from disasters are not compensated. Street vendors are among the most affected.
3. Skill development schemes for the urban poor such as Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM), Pradhan Mantri Kaushal Vikas Yojana (PMKVY), and Mukhyamantri Bhavishyalakshi Kaushalya Vikas Yojana (MBKVY) do not take into account



climate change. As a result, there is no focus on climate resilient livelihoods which is the need of the hour.

4. National Mission of Sustainable Habitat focuses on recycling and urban waste management but does not pay any attention to waste pickers, their contribution to recycling and reducing carbon footprint of cities, and their need for livelihood security and climate resilience.
5. Heat action plans have no special focus on outdoor workers that are among the most vulnerable population groups to heat stress. As a result, they do not get any support or relief to cope up with heat. Lack of focus also results in poor implementation of safety measures by the employers of construction workers.
6. Livelihood security schemes have overall poor implementation in the studied communities. The workers have a poor coverage of registration and I-cards to be begin with. Their level of awareness of their entitlements is also very dismal. Those having registrations and I-cards were not aware of their entitlements and thus could not access them.
7. The study participants reported not participating in any procedures of government programs or schemes meant for informal workers. The exception was street vendors' participation in Town Vending Committees (TVCs). However, even street vendors reported being unable to bring about the desired change through TVCs. Women's SHGs are not enough to ensure meaningful participation in government procedures. They remain limited to being "beneficiaries" only.
8. The BOCW Welfare Board is highly understaffed and under-equipped because of which they could not ensure the implementation of government policies and advisories or engage in awareness building activities among construction workers.

### Recommendations

1. **NAPCC needs revision to incorporate a special attention to the vulnerabilities of informal workers to climate change.**
2. Disaster Management policy also needs revision to incorporate security measures for informal workers.
3. **The National Policy on Occupational Safety, Health and Environment at Workplace also needs revision to incorporate a special attention to the vulnerabilities of outdoor and informal workers to climate change.**
4. DAY-NULM, PMKVY and MBKVY also need to acknowledge climate change and its impact on urban poor livelihoods. The schemes need a realignment of focus on climate resilient livelihoods.
5. **National Mission of Sustainable Habitat should be revised to bring waste pickers at the centre of a strong waste recycling system in cities.** Their contribution to waste recycling should be acknowledged as recommended by the National Environmental Policy 2006, and they should be rewarded accordingly in terms of economic equivalent of carbon credits. Climate resilience and livelihood security should be aimed for waste pickers. Waste pickers should be acknowledged as frontline climate warriors.
6. **Heat action plans at all levels need special focus on outdoor workers.** A different approach is needed to ensure their safety in a way that they are able to access help when needed without having to compromise their livelihoods or savings. Stricter regulation of employers of construction workers is the need of the hour as heat stress is increasing every year.
7. Livelihood security schemes need better implementation at the grassroots. The coverage of these schemes needs improvement. Awareness should be increased through direct communication efforts at the grassroots.

8. Informal workers need better avenues for meaningful participation in the decision-making and implementation of government schemes meant for them. TVCs need improvement to enable street vendors to bring about the desired improvements.
9. The BOCW Welfare Board should be provided more staff and resources to execute their work effectively.

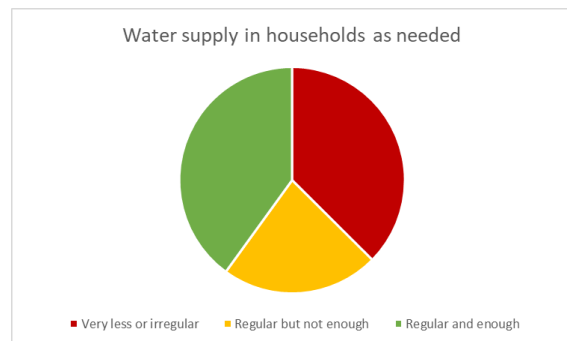
#### IV. WATER AND SANITATION RELATED VULNERABILITES

##### Policy analysis

Under this category, policies and schemes related to water security and sanitation were reviewed. India’s policy on water does reflect the principle of equity here and there. However, it does not translate into tangible rights and benefits for the urban poor. The emphasis on prioritising the needs of the poor is there in the national-level policy but goes missing in the state-level policy. SBM is a big milestone in extending basic sanitation needs to the urban poor living in non-notified and slum areas, though waste collection services are still to be guaranteed to informal residential areas. Women and girls are recognized as vulnerable groups to water and sanitation crises, however, the policies lack an acknowledgment of further challenges to their water and sanitation needs in the face of climate change. Community participation is not enabled at the higher levels of decision-making.

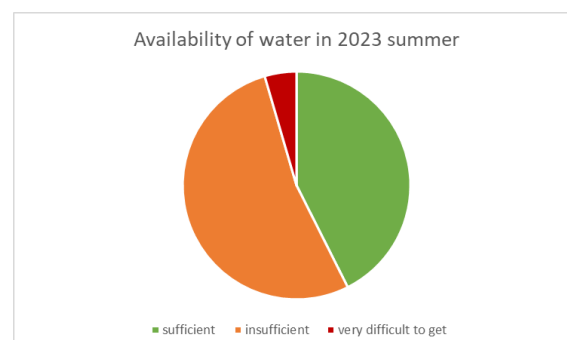
##### Field observations

Almost 93% of the household survey respondents reported that they have received a drinking water tap connection from the government, while 7.1% respondents shared that they had not received it yet. However, only 40% of the household respondents said that the **water supply** is regular and enough. 22.6% respondents said that the water supply was regular but not enough and as high as 37.4% respondents reported that the water supply was very less or irregular. Due to insufficient water supply, 80.6% household respondents shared having to depend on other sources of water such as private tankers (28.4%), municipality tankers (13.5%), borewells (15.5%), neighbours (18.7%), and stand posts (4.5%).



The average monthly **cost** of buying drinking water was INR 636 for about 82% of the respondents while the rest did not have to spend any money to buy drinking water. Besides this, 37.4% respondents also spent money of an average of INR 952 monthly to secure water for domestic use. Moreover, 38.7% respondents also paid water tax annually of an average of INR 455. The total annual expense towards water including water tax came out to be an average of INR 11,522 for 92.9% of the respondents while the remaining did not incur any cost for water.

Among the households surveyed, 42.6% reported having access to sufficient drinking water in 2023 **summer** while 53% had insufficient access to drinking water. Additionally, 4.5% respondents reported facing a lot of difficulty in securing drinking water. 55.5% respondents shared that the purity of the water was worse and 36.1% reported it being more expensive this summer than the usual. A total of 54.2% respondents also reported that their time



spent on securing drinking water increased during summer, and increased tremendously for 11% respondents among these. Moreover, 60% respondents reported having to limit their water usage because of shortage this summer, with 22% respondents among these having to limit their water usage quite a lot.

Only 17.6% of the surveyed workers said that they had sufficient access to drinking water at their workplace this summer. 42.4% workers said that there was no water available at their work sites, 37% workers said that the water available was insufficient while 3% workers shared that it was very difficult to get water. Majority of street vendors and waste pickers reported having no arrangement for drinking water at their work sites and construction workers had more access to drinking water than them. However, water access was still sometimes a challenge for construction workers as well. Regarding access to water during summer, 59.4% workers reported that they had to limit their use of water because of shortage.

In the household level survey, 92.3% of the respondents also reported that they get irregular water supply in their toilets. Lack of sanitation facilities were reported by 12.9% household survey respondents because of which their family members had to resort to open defecation. Improper maintenance of gutter lines was also a reason cited by the study participants. Among the surveyed workers, 60% shared that there was no toilet available at their work sites. Among those who could access toilets at work sites, 48.5% reported not having sufficient water for use in toilets this summer.

*“We have a lot of trouble with sanitation. We don’t have any. And the other problem is that of washroom. Men also go there, women also go there (referring to an open field). Everyone has to go there only.” “They say that men watch women going there. We do not feel good about it. Can you please help us for it?” – residents of RTO colony*

### **Key gaps identified**

1. Water security for the urban poor is missing in the national policy on climate change. The study results show that urban poor communities constantly face less access to water and increased cost of securing water. The struggle is at their place of residence as well as workplace. The problem gets much worse in summers.
2. No efforts for rainwater harvesting or cleaning and restoration of lakes were reported in this study.
3. There are no community toilets available at sites of kutcha houses. The result is widespread practice of open defecation. The study findings contradict the government’s claim that Bhuj is an open defecation city. Women are most affected because of lack of sanitation facilities.
4. Improper management of sewer waste water and resulting flooding is a common issue across most urban poor settlements with semi-pucca and pucca houses. The problem is also impacting the health and safety of residents.
5. No citizen participation was identified for water management among the communities where this study was conducted.

### **Recommendations**

1. Climate justice cannot be ensured for the urban poor without access to affordable water for drinking and daily needs, at their place of residence as well as work. Mere provision of tap connection has proved insufficient. More efforts are needed to ensure regular and clean water supply to urban poor communities. Drinking water facilities should be provided at public sites for outdoor workers to access.

2. In order to improve water security of urban poor communities, rainwater harvesting and restoration of existing lakes should be taken up with priority.
3. Community toilets are much needed at sites of kutcha house settlements where migrant workers and waste pickers live.
4. Sewer waste management needs to be prioritised in Bhuj city and sewage water should be better channelised through well-functioning drainages and treated instead of being released untreated in local lakes. Rainwater drainage system is also required. These will drastically reduce the problem of frequent flooding and resulting impact on health.
5. As recommended in the National Water Mission and AMRUT guidelines, local action plans, water user associations and monitoring committees are much needed for equitable water management through citizen participation.

## V. FOOD SECURITY

### **Policy analysis**

Women and children have been rightly prioritised in the food security policies of India. Also, traditional food items such as millets that provide more nourishment and are more climate resilient than wheat and rice are being promoted under the schemes as an adaptive strategy to climate change. However, the local level variation of available nutritious food items, needs, cultural preferences, and local knowledge are not being accounted for. The policy adopts a top-driven approach and ends up imposing a uniform diet and menu for people across cultures and regions of India. The processes for food security programs are starting to get participative only at the local levels.

### **Field observations**

A stark majority of household survey respondents, 88.4% of them, reported that basic food items such as wheat, rice, millets, pulses, vegetables, and fruits were more expensive in 2023 summer than usual. Access to food provisions was also a challenge during Biparjoy Cyclone. Among the households surveyed, a majority of the respondents (74%) reported being eligible for PDS provisions. 17 respondents out of these (14.8%) shared that they were unable to access the PDS provisions while 32 respondents (27.8%) shared that the provided ration was not sufficient for them. The most common reason cited for being unable to access PDS provisions was lack of the needed information. Access to PDS was most challenging for migrant communities since their ration cards were registered at native addresses.

In the household survey, 17 families had family members eligible for Anganwadi program and all of them reported accessing it. Only one of them said that the provided food ration was not sufficient for the need. 18 of the surveyed households also reported having school-going children eligible for PM POSHAN program. All the children were getting mid-day meals at schools but three of them felt that the food provided was not sufficient for their needs.

### **Key gaps identified**

1. One Nation One Ration Card is not yet implemented in Bhuj city. Migrant workers suffer the most in absence of it. Fair price stores where ration is distributed under PDS scheme add another bottleneck to accessibility for the urban poor as the duration of ration availability is restricted.
2. The food provisions under PDS scheme were lacking in variety. Food also reportedly became more expensive and unaffordable for the urban poor during summer.
3. Apart from the PM POSHAN scheme, the study participants reported no opportunity to participate in government schemes decision-making and implementation.

## Recommendations

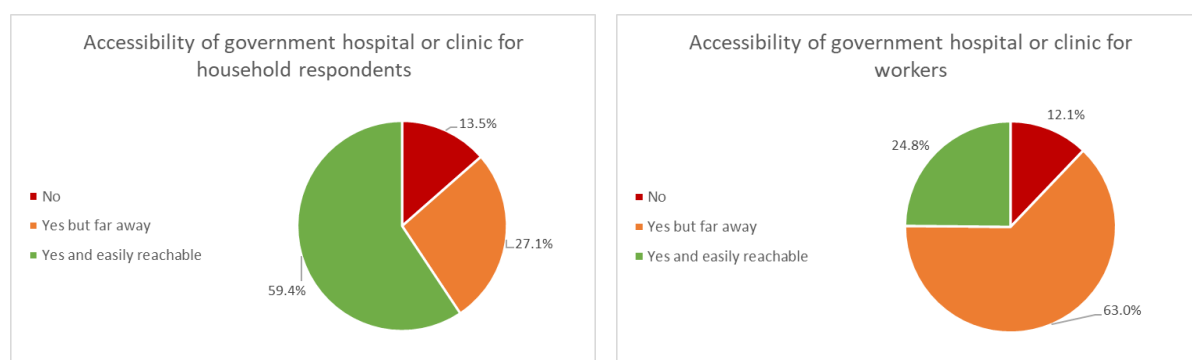
1. One Nation One Ration Card initiative must be prioritised for ensuring food security for vulnerable migrant communities. PDS scheme needs further strengthening to ensure greater accessibility for working population that cannot access fair price stores during work hours.
2. The food provisions under PDS scheme should include all the promised variety. In addition, rising prices of food during summer should be taken into account and food security should be ensured for the urban poor.
3. Citizen participation needs to be enabled in food security schemes such as PDS and Anganwadi under ICDS.

## VI. HEALTH

### Policy analysis

The urban poor have received substantial attention in the health policies and schemes of India. Informal settlements have also received coverage under the policy. The health issues most common to the urban poor owing to their socioeconomic challenges, living, and working conditions have also received good attention. The policies aim to universalise the coverage of health care, minimize the expenses, and take the services to locations where the urban poor reside. However, overall, in the health-related policies and schemes in India, the awareness of climate change and the potential health hazards it offers to vulnerable groups is missing. As a result, the policies and schemes are not aligned to address climate change-related health challenges. The skewed distribution of exposure to climate change impacts between the rich and the poor owing to their work and living conditions, have not been sufficiently addressed in policy. Occupational hazards are also neglected in national health policies. In the absence of any acknowledgment of health issues arising from workplace conditions or due to climate injustice, the urban poor are framed as “beneficiaries” and not as “victims” and their health care remains short of being seen as their “right.” Housing conditions in informal settlements are not linked with exposure to heat stress.

### Field observations



Majority of the households surveyed, 59.4% respondents, shared that they were able to **access** and easily reach a government hospital or clinic when any family member fell sick. However, 27.1% respondents shared that the government hospital or clinic was accessible but far away. An additional 13.5% respondents reported not having access to any government hospital or clinic in times of need. Among those who accessed government hospitals and clinics, 21.6% found the treatment expensive and 44.8% did not find the treatment effective enough for their needs. Also, 92.3% respondents reported not having any healthcare insurance or coverage provided by the government.

Among the workers surveyed, 12.1% reported having no access to any government hospital or clinic for healthcare when sick. A majority of 63% reported that the government hospital/clinic was

accessible but far away while only 24.8% workers confirmed that the some or the other government hospital/clinic was accessible and easy to reach for them. 29% of the workers who could access them also felt that even the government hospitals and clinics were too expensive. Additionally, 49% of the workers who accessed treatments at government hospitals and clinics found them to be not effective enough for their needs. Also, 98.2% workers shared that they had not received any health insurance or coverage from the government.

In 2023, the heat stress was felt to be much more than the previous year. This also had an impact on the health of the study participants. Most affected were women and children. Informal and kutcha houses residents were more vulnerable to impact on health due to severe climate conditions. When we asked the study participants whether they had received any information on how to protect themselves better from heat stress, none of them answered in affirmative. No local awareness efforts by the government were reported. Apart from this climate severities, the study participants also did not share any regular health awareness programs happening for the community members.

### **Key gaps identified**

1. Climate change is not addressed in the National Health Policy (NHP), 2017.
2. While the NHP prioritises equity, the study results show lack of equity and accessibility of affordable and effective healthcare for the urban poor. The quality of healthcare in government hospitals is reportedly bad.
3. Health coverage is very poor among the urban poor in Bhuj city.
4. Community health workers and volunteers are not much active in the communities where we conducted this study.
5. Mosquitoes were also a common problem in most of the settlements visited. With increase in heat and humidity, this problem is expected to get worse.
6. Citizen participation for healthcare program implementation does not exist at all in the communities covered in this study.

### **Recommendations**

1. The NHP should be revised to acknowledge climate change and address its impact on the urban poor.
2. The principle of equity in NHP should be brought about in practice. Comprehensive and quality healthcare should be provided in government hospitals and clinics instead of leaving specialised treatment and medication supply to private providers that escalate the costs involved.
3. Focused efforts are needed for ensuring universal health coverage for the urban poor as envisioned under NHP.
4. More community health workers and volunteers are needed to cover all urban poor settlements in Bhuj city.
5. The municipality should do more regular treatment to control mosquito population.
6. Citizen groups should be created among the urban poor and their participation in government scheme implementation should be enabled to ensure their climate resilience.

## **VII. MIGRATION**

### **Policy analysis**

Here an attempt was made to review the policies that relate to migrant workers. The government policies are still not recognising climate change induced migration. As a result, the needs of climate migrants and refugees have not been recognised as well. Various policies attempt to provide access

to migrant people to diverse schemes regarding social security, labour rights, livelihood security, food security, health care, and education. However, their needs for adequate housing in urban areas and basic services such as water and electricity remain largely unaddressed.

### **Field observations**

Migrant workers pose competition to local residents engaged in informal work. Those new to housing settlements were also looked at by the older residents with some hostility. We did not come across any government programs or initiatives being run that were meant exclusively for migrants be it related to livelihood opportunities, food security, healthcare needs, or housing.

### **Key gaps identified**

1. There is no attention paid in policy to climate refugees coming to cities in search of livelihood and basic needs. Only livelihood and skill development related schemes acknowledge the needs of migrant workers.
2. Migrant workers face conflict over housing space and livelihood opportunities with local workers. Their vulnerability also exposes them to exploitation by their employers who pay them less than the standard wage.
3. The condition of migrant workers in Bhuj city is far away from being able to participate in government initiatives and influence the outcome as desired.

### **Recommendations**

1. Climate change policies should be revised to accommodate the livelihood, housing and basic needs of climate refugees to cities.
2. The government needs to make special efforts to protect migrant workers from exploitation by their potential employers so that they can earn wages at par with local workers.
3. The housing needs of migrant workers should also be addressed in a planned manner instead of leaving them vulnerable to local mafias.
4. Government initiatives should focus on enabling migrant workers' participation in its implementation and decision-making so that they can address their vulnerabilities and needs effectively.