

Towards Climate-Responsive Social Protection: Addressing Extreme Weather Risks for Urban Migrant Workers



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Executive Summary

Extreme weather events such as increasing heat, excess rainfall and floods are constantly disrupting the work and households of workers in Bengaluru. They face depleting wages as a result of wage loss, wage cuts and job losses. At home, the precarious housing conditions in which they live, often in informal settlements, further exacerbate impacts, with workers reporting house damage, health issues, food insecurity and rising expenses. Social protection can serve as a powerful welfare tool for governments to address these impacts during climate shocks, helping workers tide over periods of distress. However, in the current social protection landscape, schemes are not designed for extreme weather concerns and these communities often face operational challenges to access schemes. Making these welfare schemes more inclusive, accessible to diverse populations and responsive to climate shocks would only support vulnerable communities better.

This research looks at 6 national and state-level schemes in India that can address the heightened vulnerabilities of workers impacted by extreme weather. **These schemes, which have the potential to address different impacts that workers face indirectly as a result of extreme weather such as health, livelihood, food insecurity and rising costs, include Ayushman Bharat Yojana, BoCW Karnataka, the Public Distribution System and Anna Bhagya Yojana, Gruha Jyothi and Gruha Lakshmi Yojana. The research draws on surveys with 584 migrants from our previous research 'Coping with Climate', 5 Focus Group Discussions with 34 workers and discussions with 4 experts.**

Key Takeaways

- **Ayushman Bharat - Building health resilience of workers during extreme weather:** Although many have access to Ayushman cards, they fail to avail these benefits and end up incurring massive health costs. Some key barriers include incomplete information on the mechanisms for access, delays and infrastructural challenges at hospitals during benefit delivery.
Recommendations for consideration:
 - * Include out-patient department facilities within the ambit of the insurance coverage of PM-JAY.
 - * Trigger temporary universal coverage during weather events in at risk zones.
 - * Redesign the scheme to formulate SOPs establishing hospital preparedness guidelines that address weather impacts on health to implement response measures.
 - * Strengthen preventive care to drive down catastrophic expenditures by working on other pillars of the Ayushman Bharat Scheme.
 - * Elevate the focus on the health infrastructure mission under Ayushman Bharat to increase capacity.
- **BoCW Karnataka - Building income security measures for construction workers:** Construction workers are among the most exposed to heat, heavy rainfall and flooding, yet schemes under the Karnataka BoCW Welfare Board remain difficult to access and are not designed to respond to climate-related shocks. Workers struggle with limited awareness, knowledge of how to access these schemes, along with challenges related to eligibility and the portability of benefits.
Recommendations for consideration:
 - * Improve delivery systems to reach workers who most need these schemes by strengthening the portability of benefits across states.
 - * Utilise existing funding by improving access to sub-schemes and addressing barriers.
 - * Improve scheme design for potential inclusions in existing schemes to address extreme weather.
 - * Design financial products to be triggered during shocks such as extreme weather.
 - * Strengthen anticipatory protection by linking BoCW benefit delivery with early warning systems and city-level climate planning processes, including Heat Action Plans.
- **Public Distribution System and Anna Bhagya Yojana - Building food security mechanisms for workers:** Primary challenges in accessing benefits of these schemes include inconsistent supply and procurement of food grains. During weather events, many affected people who are financially vulnerable are unable to receive support due to stringent eligibility requirements under the state scheme.
Recommendations for consideration:
 - * Provide dynamic eligibility for access to benefits during extreme weather events.
 - * Prioritise in-kind food assistance over DBT to address food insecurity effectively.
- **Gruha Jyothi Scheme - Building economic resilience for workers:** Gruha Jyothi has strong potential to address heat-related financial stress by lowering electricity expenses during extreme heat. However, most migrants and low-income households are unable to benefit due to unclear processes, shared meters, landlords controlling subsidies and limited knowledge of tenants' eligibility. Digital barriers, strict documentation requirements and lack of informal settlements targeting and budgeting further exclude households in informal settlements.

Recommendations for consideration:

- * Simplify eligibility requirements for tenants, especially migrants.
- * Introduce informal settlements targeting and budgeting within the scheme.
- * Make the scheme seasonally flexible by increasing the upper limit of electricity consumption during extreme heat months.

- **Gruha Lakshmi Yojana - Safeguarding communities from extreme economic shocks:** Gruha Lakshmi provides monthly transfer of ₹2000 to women household heads and has high visibility and uptake. However, many women migrants are still facing barriers in accessing the scheme. Those who do receive the benefit report that the cash transfer is a crucial support during extreme weather, helping them buy food during rain-related wage loss, pay for extra water cans during summer months and repair household damage.

Recommendations for consideration:

- * Vertical expansion of benefits during periods of extreme weather by introducing seasonal or crisis-linked top-ups.
- * Ensure timely and fast transfers especially during extreme weather seasons.
- * Strengthen grievance redressal mechanisms for effective problem solving for beneficiaries.



Chapter 1

Introduction



In 2021, Bengaluru ranked 25th in a global index of 100 most vulnerable cities to environmental risks, its changing weather is increasing risks to the populations that reside there.² The city is one of the top ten most densely populated cities in the world, with a population more than a 12 million, out of which an estimated 4.2 million are migrant workers.^{3,4,5}

Extreme weather events such as rising temperatures, increasing rainfall, and floods continue to pose major threats to wages, health, and living conditions of informal and migrant workers, often leading to fatalities and violations of human rights, increasing their precarity in the city.^{6,7} The nature of their work is mostly outdoor and labour-intensive leading to high exposure levels. They live in informal settlements where basic amenities are largely missing. On top of that, there is poor penetration of government programs, specifically for migrants. The lack of documents and the portability¹ of social entitlements leads to limited access to social security, which further increases their vulnerability and expose them to exploitation.⁸ These challenges, when compounded with increasing extreme weather events, exacerbate their vulnerability, making them more susceptible to losses.

In order to address these issues, the government has an array of social protection mechanisms in place, although not designed originally with climate risks in mind, leveraging them could help build the resilience of vulnerable communities. Welfare schemes in India are designed with diverse objectives and perspectives such as poverty alleviation, gender empowerment, health security, food security, labour rights, etc., to provide a much-needed safety net for citizens during external shocks. Research studies have noted that strategic support through social security schemes can help communities with quicker recovery and enable the strengthening of the adaptive capacity of households when facing repeated climate risks.⁹ A recent working paper (2022) by IIED evaluated how existing schemes can support migrants moving or being displaced due to climate. It observed that MGNREGA in two rural districts reduced the likelihood of distress migration and supported communities better during events such as droughts.¹⁰ Additional evidence from IIED's broader work on adaptive social protection also highlights the importance of portability, flexible eligibility, and shock-responsive delivery systems for populations facing climate-related displacement and livelihood disruption.¹¹ These insights reinforce the relevance of examining how existing schemes in Karnataka could be adapted to better support urban migrant workers during climate shocks.

Given the increasing importance of social protection in supporting communities to adapt to this changing environment and reducing economic distress, it becomes essential to look at the current scheme landscape and their interplay with climate shocks. Our research looks at three **National schemes (Ayushman Bharat, BOCW Karnataka and the Public Distribution System - ration) and three state schemes (Anna Bhagya Yojana, Gruha Jyothi, and Gruha Lakshmi) to understand these interconnections.** Even though these schemes are not designed to respond to the impacts of extreme weather events on internal migrants or informal workers, there remains significant untapped potential within them to contribute to climate resilience as they already reach at-risk/vulnerable groups. By widening the scope of scheme objectives and benefit criteria, social protection schemes can act as a channel for delivering the required support to vulnerable populations, including migrants, and build their capacities to cope with the different economic and social impacts of extreme weather events.

In view of this, this study looks at the following:

1. What weather risks are affecting the migrant population in Bengaluru and their impacts;
2. How national and state policies already support migrants during weather impacts; and
3. Recommendations for the future potential of climate-linked service provisions within each of these schemes.

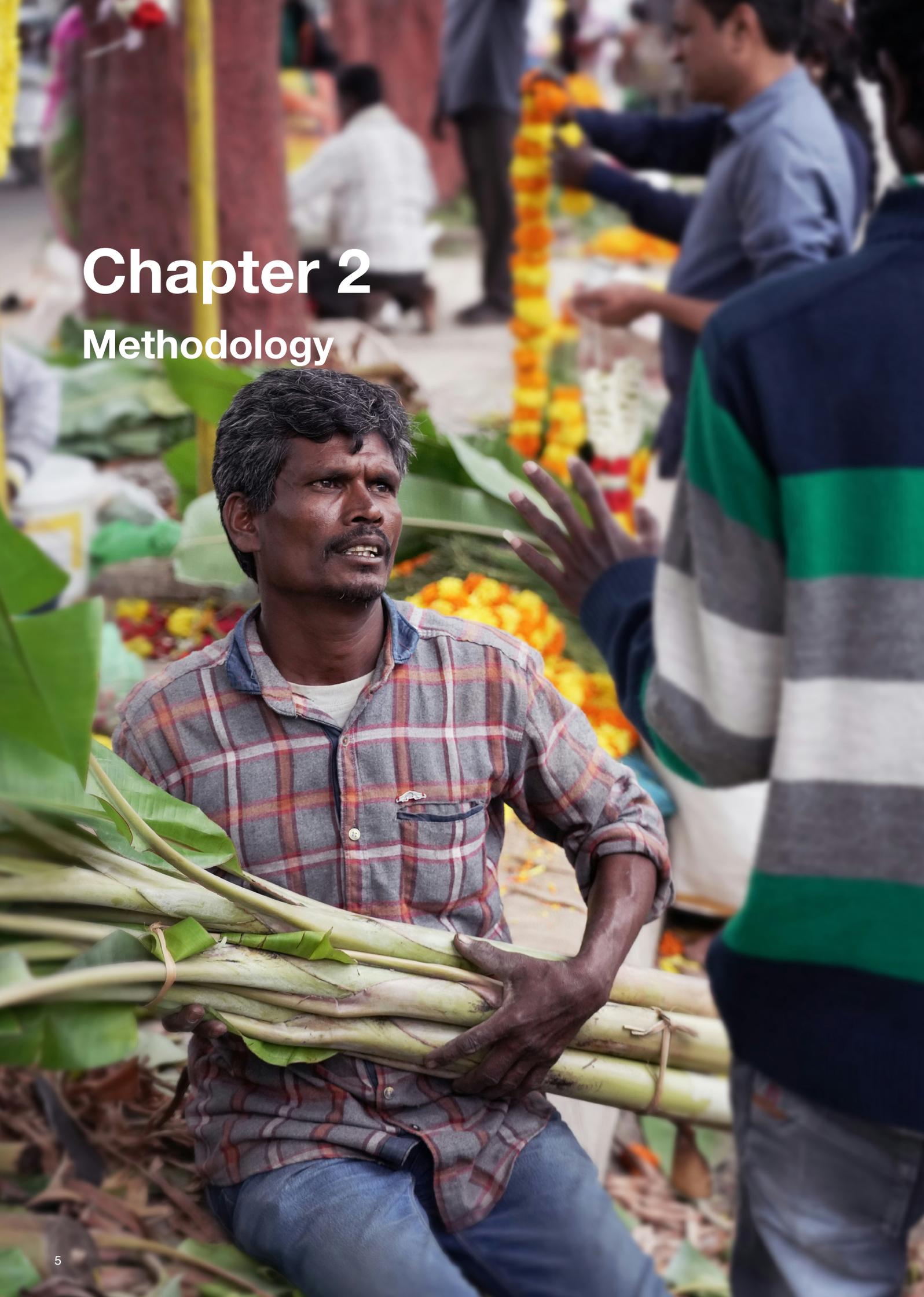
This research study consists of 5 chapters:

- **Chapter 1: Introduction**, contextualises the issue of weather impacts on internal migrants in Bengaluru and the scope of building on existing social protection mechanisms for climate resilience..
- **Chapter 2: Methodology and limitations**, gives a description of the research processes undertaken to bring together the findings of this study and highlights some of the limitations.
- **Chapter 3: Climate risks and vulnerability**, maps the weather events experienced by migrant workers in Bengaluru, how they impact their livelihoods, living conditions and health, and finally documents the coping mechanisms and the lack thereof.
- **Chapter 4: Social protection and climate resilience** presents the policy analysis of the selected government schemes, the gaps in access and how they do and do not address the impacts of weather events and what needs to change in order to bring a climate resilience lens within these existing schemes.
- **Chapter 5: Conclusion**, summarises the action points for the selected social protection measures to improve the resilience of workers.

¹ Portability refers to social security entitlements being transferable and accessible beyond one's domicile, where the benefits and entitlements were initially said to be accessible.

Chapter 2

Methodology



The study adopts a mixed-method approach combining qualitative primary research with secondary desk review and analysis of existing quantitative datasets to understand how social protection schemes can support migrant workers facing extreme weather risks.

City selection

Evidence from our previous research suggests that Bengaluru’s informal and migrant workers are among the most extreme weather-exposed groups in the city. They face significant income losses due to extreme weather with limited means to cope. The city has also been an important project area for our Migrants Resilience Collaborative implementation team to work on improving social protection access for communities affected by climate change. Therefore, with existing work on schemes and evidence on vulnerable communities, the city and its workers become an important area of work to understand social protection’s role in building resilience.

Desk Review

A comprehensive review was undertaken on climate issues in Bengaluru and their impacts on vulnerable communities with a focus on informal and migrant workers.

Scheme selection and review

A total of six schemes were selected for review based on the entitlements that they provide to workers which could directly provide relief for specific weather impacts on informal workers. A detailed review of selected social protection schemes documents, government websites, and datasets was undertaken to assess the design, map existing measures and benefits, identify limitations and assess the potential for integrating climate resilience within the schemes.

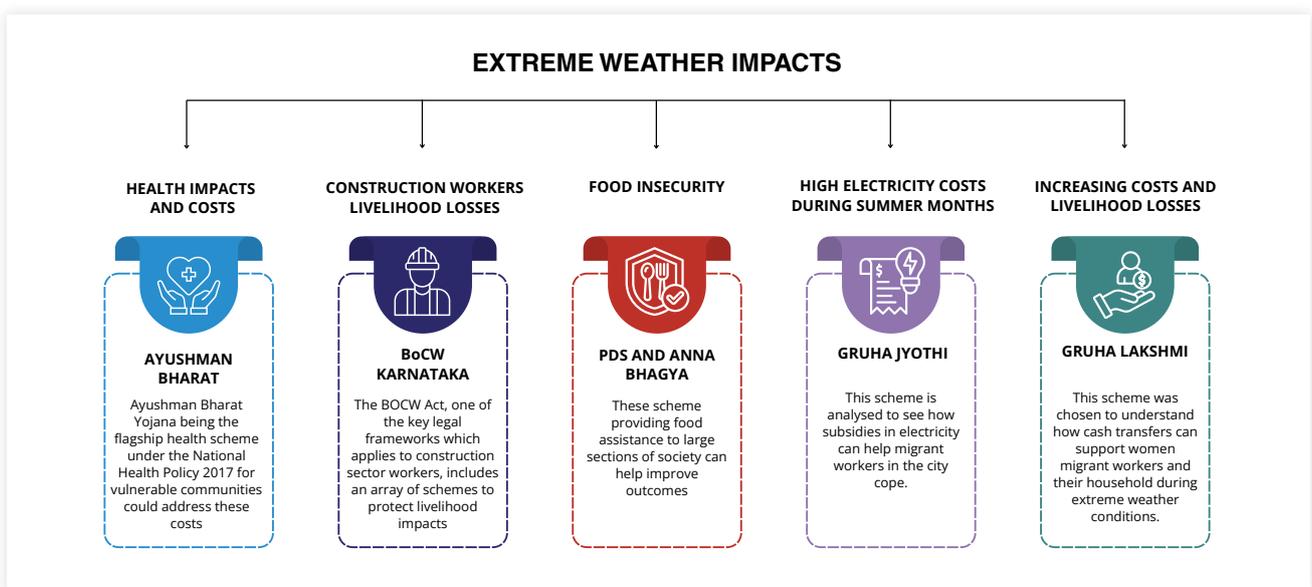


Figure 1: Scheme selection criteria

Qualitative Research

- **Focus Group Discussion (FGDs):** A total of five FGDs were conducted in informal settlements of Bengaluru. Participants of the FGDs included migrant workers engaged in informal work such as construction work, domestic work and waste picking. Across the five FGDs, a total of 34 migrant workers participated. To ensure gender balance, we conducted two women only, two men only and one mixed group discussion.
- **Key informant Interviews:** Four KIIs were conducted- two with NGOs and two with academic experts. These interviews explored potential pathways and recommendations for integrating climate resilience into the existing social protection schemes.

Quantitative Research

This study draws upon the Coping with Climate¹² dataset. In 2024, 584 surveys were conducted in Bengaluru as part of the survey for the study in May 2024, along with 41 other districts in India. The findings from this survey were used in a larger research study conducted across five countries in South and Southeast Asia. The questions in this survey were on the impacts of extreme weather events on the lives and livelihoods of internal migrants.

Chapter 3

Weather Risks and Vulnerability: Bengaluru's Migrant Workforce



Bengaluru is experiencing rising climate risks marked by higher temperatures, erratic rainfall, and frequent urban flooding.¹³ Rapid urbanisation has led to the loss of green cover and water bodies, further intensifying the urban heat island effect.¹⁴ Land surface temperature in the city has risen by nearly 8°C in the past two decades, leading to warmer nights and offering little relief from daytime heat.¹⁵ Alongside rising temperatures, changing rainfall patterns are creating another set of challenges. Rainfall patterns are shifting, with fewer rainy days but heavier downpours, making Bengaluru one of South India’s most flood-prone urban districts.¹⁶

These intense and frequent weather events are leading to disruptions for workers, impacting them disproportionately.¹⁷ Their existing precarities make it more difficult for them to cope with weather-related shocks during such weather hazards.

Migration patterns and the role of extreme weather²

Informal internal migrants move to urban centres mainly as a result of the financial distress that they face in rural areas of the country. During the survey conducted last year for our research ‘Coping with Climate’, the Bengaluru data revealed that over 83% of migrants, i.e. more than three-fourths of the sample, mentioned moving as a result of economic reasons (Figure 2). Pull factors for migrants to choose Bengaluru centred around similar reasons. Even though weather-related factors and disasters didn’t play a larger role in driving migration directly, the survey results revealed that extreme weather impacted nearly all migrants negatively (Figure 3). Of the 99% impacted individuals, about 66% of workers mentioned facing negative impacts primarily at their destination, i.e. Bengaluru. This makes it visible that the city was making populations increasingly vulnerable. Another striking factor was that almost half of the workers in the sample were facing impacts at both source and destination locations, indicating dual impacts at these locations, leading to further distress.

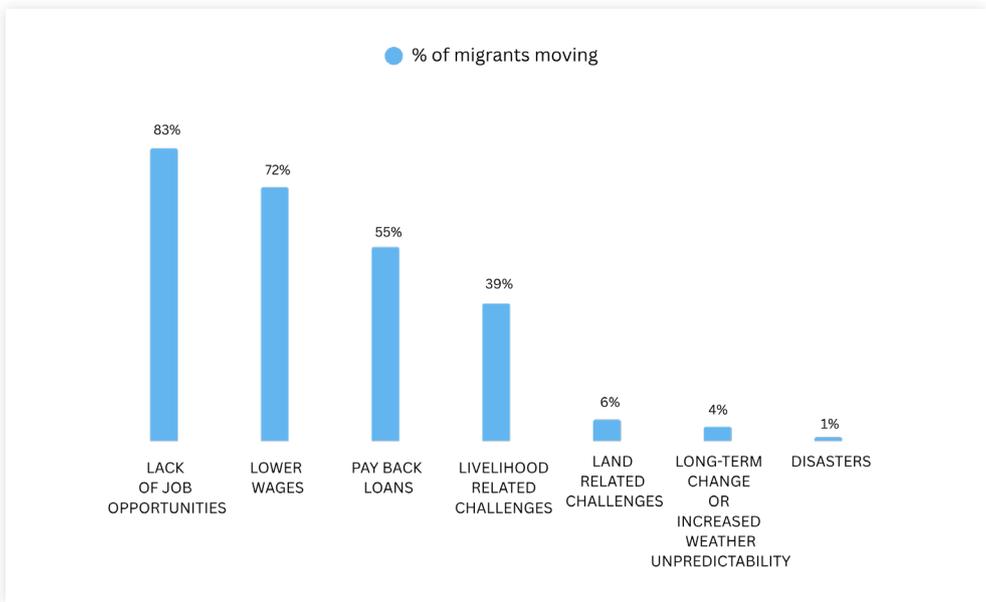


Figure 2: Distribution of reasons for individuals migrating to Bengaluru

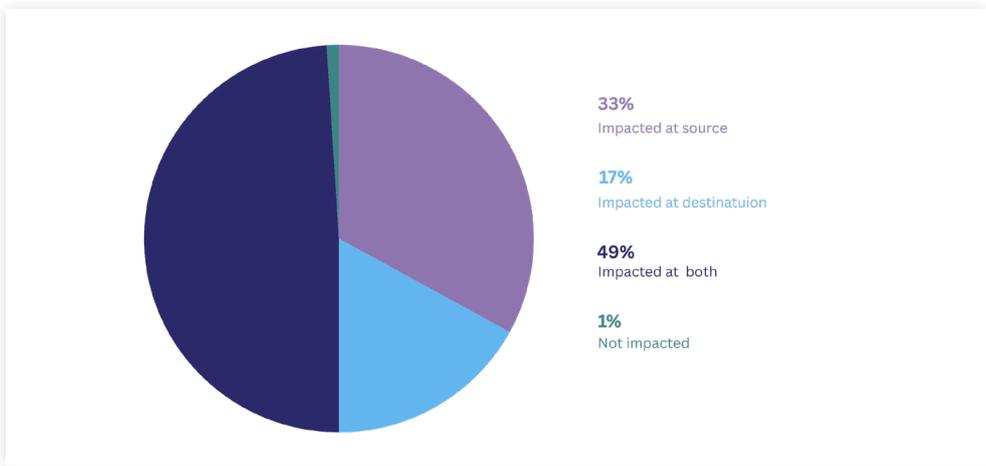


Figure 3: Proportion of migrants impacted negatively by extreme weather events in Bengaluru

²This section is based on responses from the 584 migrants surveyed in 2024 for the coping with climate study

Extreme weather and its impact on Bengaluru's migrant population³

Workers surveyed in Bengaluru were employed in the construction sector (70%) and cement work (27%) followed by domestic work (22%) and waste processing (16%).⁴ Considering that most of these jobs have high outdoor exposure, the negative impacts on work, households, and health are also more pronounced.

Based on the survey, most workers in Bengaluru were troubled by increasing heat, rains, and floods (Table 1). During focus group discussions, workers spoke about the increasing unpredictability of these extreme weather events, which was heightening their troubles.

”
“The rains have changed in the city. Now, we get very heavy downpours that come suddenly. Earlier, it was easier to plan, but now it’s unpredictable, and work often stops”

 Sita, Construction worker

Table 1: Major weather events experienced by migrant workers in Bengaluru

Increasing Heat	Excess rains	Floods	Urban Droughts	Increasing Cold	Cyclones
89%	76%	39%	36%	15%	13%

These extreme weather events were causing distress across areas of work and households for workers, disrupting their ability to continue working. At the workplace, they were faced with wage loss (83%), wage cuts (64%) and job losses (56%) (Figure 4).

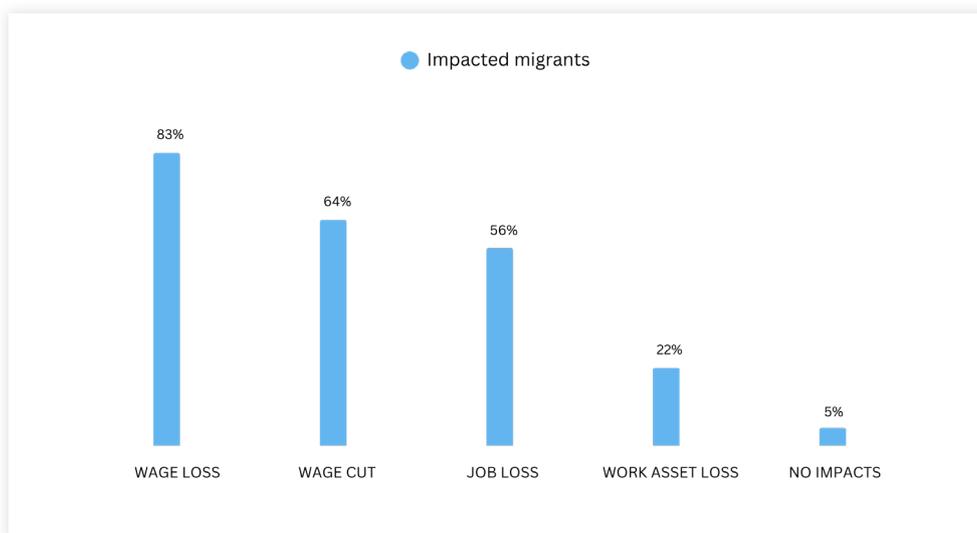


Figure 4: Work impacts faced by migrants in Bengaluru

During discussions with workers, they mentioned exhaustion and reduced productivity during the summer months. These were leading to adverse consequences such as accidents and health issues. However, the fear of wage loss in the event of not working made them continue working regardless.

”
“During summer, work slows down because of the heat. We try to rest under the shade or take water breaks, but no one provides that for us, as we manage on our own. Even when we feel exhausted, we continue working because if we stop, we don’t get paid”

 Rajeev, Construction worker

³ This section is based on responses from 388 migrants surveyed in 2024 for the coping with climate study, who faced extreme weather impacts either only in Bengaluru or in the city and their source locations.

⁴ This question was asked a multiple-choice question to respondents.

The monsoon period in the city saw a direct impact on wages and jobs in comparison to rising temperatures. The commutes became more difficult, sites shut down for days on end, and some types of construction work came to a complete standstill.

The consequences of these weather events on households have further implications on their work (Figure 5).

”
“When it rains heavily, all construction work stops. The contractor says it’s unsafe and sends everyone home. That means no wages for two or three days. We borrow from neighbours or take small loans just to buy groceries”

 Sanjay, Construction worker

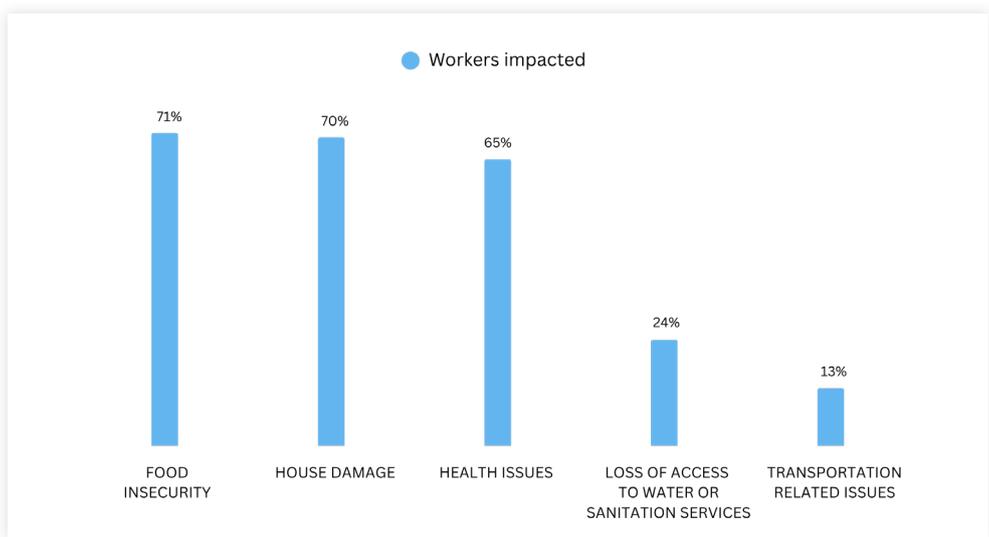


Figure 5: Household level impacts faced by migrants in Bengaluru

Workers who live in precarious housing and informal settlements face limitations in their basic needs, such as water and sanitation services. They face food insecurity due to ration spoilage. Their houses were unable to cope with rising heat in the summers and water damage during the monsoon period. Geeta, a domestic worker shared that her house “becomes like a furnace by afternoon” forcing her to wake early and finish cooking by afternoon, before the temperature rises.

Health issues due to vector-borne diseases such as dengue and malaria were common during this period leading to workers inability to go to work. These impacts were unequivocally creating severe distress for workers, leading to significant work-related impacts indirectly.

”
“Our roof leaks badly whenever there’s heavy rain, but we don’t have enough money to repair it. We just keep a bucket under the dripping spots and wait for the season to pass”

 Rajshree, Sanitation worker

”
“During the rainy season, mosquitoes become a big problem. We can’t step out in the evening without being bitten. Sometimes we burn wood to create smoke and drive them away, but that’s not always possible”

 Shyam, Construction worker

Rising expenses due to electricity, water bills, health expenses and ration damage were causing stress on already depleting wages.

”

“Honestly, both heat and rain are hard. During summer, water is scarce at construction sites, and the heat makes us dizzy. Sometimes our children come along, and they get dehydrated. During heavy rains, work stops completely, and there’s no money coming in, which makes things even tougher”

Shyam, Construction worker



External supports and maladaptive coping mechanisms⁵

During these periods of distress, external support mechanisms weren't up to scale for communities to rely upon (Figure 7). In the survey, we observed that almost three-fourths of the sample, i.e. 70% didn't receive direct assistance or emergency relief when faced with these impacts. Relief measures from the government differed as per extreme weather events, such as during floods, rescue operations¹⁸, limited compensation and temporary arrangements for shelter and food¹⁹ were typical responses while responses to extreme heat have largely been restricted to precautionary advisories rather than direct relief for affected workers.²⁰ Some migrants mentioned occasional help from NGOs or community organisations (13%); this support was, however, mentioned to be irregular and insufficient.

In the absence of these relief measures, workers relied upon maladaptive coping mechanisms such as loans from informal lenders (Figure 6). FGDs also highlighted practices like pawning gold ornaments, relying on microfinance companies for loans, and borrowing from moneylenders, friends, and family for non-productive purposes to meet daily needs. Another coping mechanism was using savings. Nearly 69% of migrants used their savings during periods of work stoppages or reduced earnings. However, these savings were small and were quickly exhausted. In FGDs, a significant number of migrant workers mentioned coping by cutting down on basic consumption. They reduced food intake, skipped meals, delayed medical care, and non-essential expenses like travel, rent, paying bills, etc. As Geeta shared and others agreed, *"When that happens, we cut down on everything — food, travel, even medicines."* This strategy was commonly used during prolonged periods of extreme rain or heat when work stoppages or loss of wages were frequent.

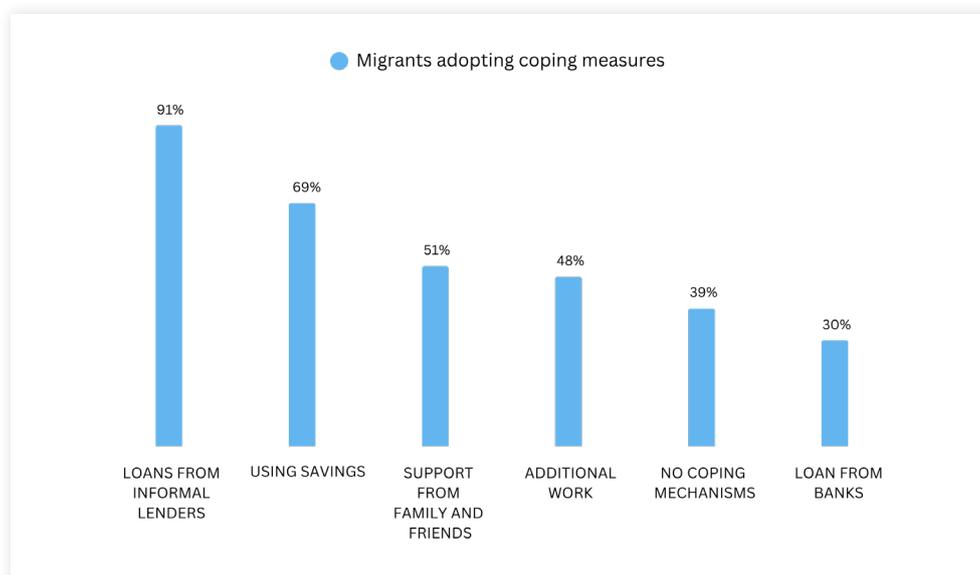


Figure 6: Coping measures adopted by migrants in Bengaluru

Overall, the lack of relief measures by governments, nonprofits, and employers, along with the adoption of maladaptive coping measures such as loans, were leading to severe distress in communities. However, across FGDs, a few migrant experiences also pointed to the potential role of social protection schemes in supporting them in dealing with the impacts of extreme weather events. When accessible, schemes like Gruha Lakshmi and Anna Bhagya played a small but meaningful role in easing financial stress during periods of heat or rain-related wage loss. However, it is important to note that these scheme benefits or their access did not increase during these extreme weather periods; rather, individuals often realised their value in supporting them and their households during these times of distress.

These insights point towards the critical potential of social protection in building or enhancing climate resilience for migrant households. The following section examines the broader social protection landscape for migrant workers and the potential it carries to support workers in preparing for, coping with, and recovering from climate risks.

⁵ This section is based on responses from 388 migrants surveyed in 2024 for the coping with climate study, who faced extreme weather impacts either only in Bengaluru or in the city and their source locations.

Chapter 4

Social Protection and Climate Resilience



Even though a large proportion of migrants move to cities seeking stability and economic advancement, a significant portion of their earnings end up being consumed by coping with the economic shocks of extreme weather events. For instance, a research found during and after the 2015 floods in Chennai, household expenditure saw a rise of 32%, specifically on food, health and fuel.²¹ As we see in the previous chapter, our survey data reveals that they are faced with wage loss (83%), wage cuts (64%) and job loss (56%) at the workplace and food insecurity (71%), housing-related damages (70%) and health issues (65%) within the household. These display rising expenditure which often leads to heavy dependence on loans (91%) and the using up savings (69%), which ultimately increases their financial distress. These short-term, debt-driven strategies weaken their financial security and push them deeper into poverty, especially as extreme weather events become more frequent. In crises like these, social protection becomes an essential welfare and well-being tool for workers already struggling to make ends meet.

Article 38 of the Indian Constitution highlights that India is a welfare state, where the government shall take comprehensive measures to ensure the social and economic well-being of its citizens. Both at the central and state levels, India has several social protection mechanisms in place which provide assistance to communities in distress such as insurance, cash transfers and the provision of basic amenities.²² The target groups for these entitlements are generally vulnerable communities such as those below the poverty line, informal workers, socially excluded communities, and other marginalised groups like migrant workers, who require equitable support to live with harmony and dignity. Thus, creating an extensive social protection landscape with diverse goals, types of benefit delivery and target coverage. However, even though the social protection architecture is extensive in the country, coverage does not always translate into actual access for migrant workers.

Evidence suggests, well designed adaptive social protection – that integrates climate risk information, anticipates shocks, enables response and scales support during periods of heightened vulnerability,²³ and is well-designed can help reduce reliance on negative coping mechanisms by cushioning income loss, protecting basic consumptions and providing a safety net during disruptions caused by extreme weather events.²⁴ For vulnerable groups, social protection mechanisms can offer a pathway to help households absorb shocks and prevent them from falling deeper into the vicious cycles of poverty when faced with climate risks.²⁵ To illustrate this, a few global examples (Box 1) show how social protection systems have been adapted to support climate resilience by governments.

Box 1: Global good practices on social protection for workers and migrants by governments

- **Parametric insurance in Nagaland, India²⁶:** The State Disaster Management Authority (SDMA) launched a multi-year parametric weather disaster risk insurance scheme in Nagaland. When there is excess rain beyond a certain threshold, automatic payments are triggered.²⁷
- **Climate insurance for health risks by Gyeonggi Province in Korea²⁸:** Citizens who experience health issues or injuries because of extreme weather receive a fixed sum. It ensures coverage for all in the province to help avoid financial and administrative challenges in accessing healthcare facilities during the weather event.
- **'I love my Neighbourhood' Program by the Ministry of Housing and Urbanism in Chile²⁹:** This programme seeks to provide participatory housing support to socio-economically vulnerable groups in informal settlements in areas prone to flooding and more susceptible to environmental contamination and other social disorders.
- **MNREGA, India³⁰:** Under this scheme, an additional 50 days of guaranteed employment is provided to the existing 100 days during droughts.
- **Hunger Safety Net Programme in Kenya:** An unconditional cash transfer was initiated in 2008 in four poorest counties to support the most vulnerable households. In the second phase, a shock-response approach was incorporated wherein some households exposed to weather events like drought were identified, and extra benefits were provided.³¹
- **Paid climate leaves in Spain:** In response to the havoc created by floods in the country in 2024, the Ministry of Labour in Spain introduced up to four days of paid leave during weather emergencies. Workers can also choose to reduce working hours after the four days in case of extreme events.³²
- **Food support during typhoons in the Philippines:** Within the Byong Bansa Handa Programme by the Department of Social Welfare and Development, there are mechanisms to trigger emergency relief supplies of food packets to typhoon affected people.³³

These social protection programs from different countries including India show that when designed with climate risks in mind, they can help reduce vulnerabilities and build resilience by preventing long-term impacts.

Policy Analysis

The following section contains a detailed analysis of each selected scheme. It delves into the key features of the schemes, the barriers faced in their implementation, followed by recommendations on integrations within scheme design for them to be more responsive to the current and future climate challenges faced by vulnerable communities.

4.1 Ayushman Bharat - Pradhan Mantri Jan Arogya Yojana (PM-JAY)

About the scheme

The Ayushman Bharat Yojana launched in 2018, falls under the National Health Policy 2017 which aims to achieve Universal Health Coverage, develop the public healthcare system and align the growth of the private healthcare sector with public health goals.³⁴ It consists of four pillars of implementation – PM Jan Arogya Yojana, Health and Wellness Centres, Ayushman Bharat Digital Mission and PM Ayushman Bharat Health Infrastructure Mission (details about the scheme in Figure 12 in appendix).³⁵ Together, the nexus of strengthening the healthcare infrastructure and extending healthcare insurance covering a varied range of diseases including dengue, heat stroke, and other weather-related illnesses could be a big support for exposed groups like migrant workers who are generally engaged in outdoor work.

Focusing mainly on the Pradhan Mantri Jan Arogya Yojana for the purpose of this report, this initiative extends cashless insurance support of five lakh rupees per family and five lakh rupees per person for individuals above 70 years old in government and private empanelled hospitals to insulate vulnerable groups from health-related financial shocks limited to hospitalisation cases. PM-JAY defines eligible households based on the income and occupational criteria of the Socio-Economic Caste Census 2011 (SECC). This number also includes families that were covered in the earlier health insurance scheme, Rashtriya Swasthya Bima Yojana even if they were not included under SECC 2011.

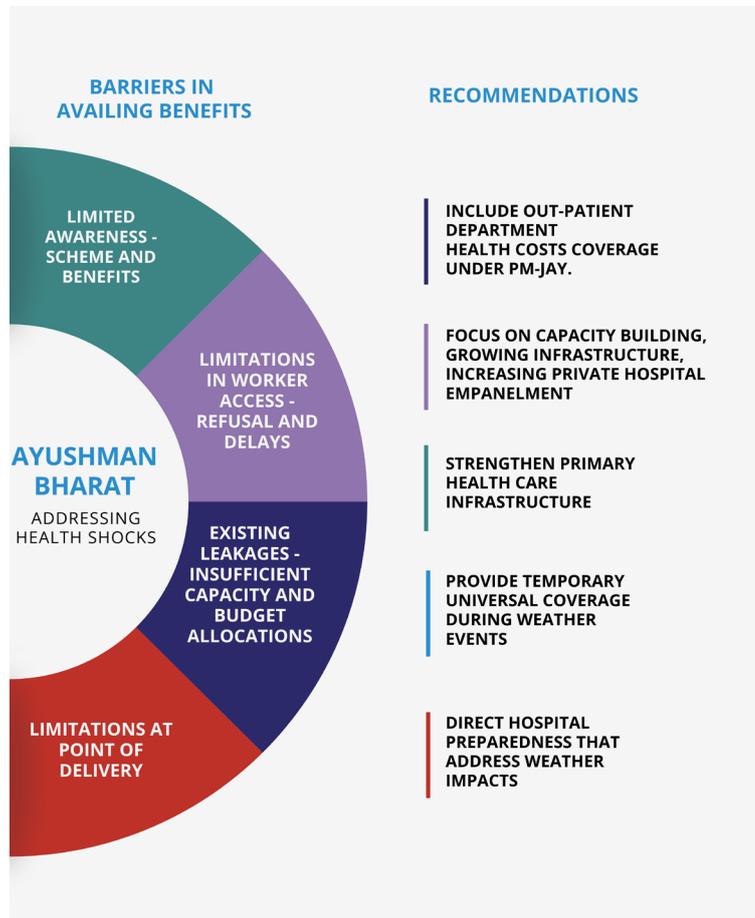


Figure 7: Overview of Ayushman Bharat scheme: Access barriers and Recommendations

The Karnataka government follows a slightly different version of the scheme which is implemented in the state by the Suvarna Arogya Suraksha Trust as Ayushman Bharat - Arogya Karnataka.³⁶ Under this, in addition to those covered under PM-JAY, it also extends to those who were included in the state health schemes before 2018. Arogya Karnataka provides ₹1.5 lakhs rupees per family per year on family floater basis for Above Poverty Line (APL) households, which means a 30% co-payment from the government and the rest to be paid by the beneficiary.

This scheme includes important measures to extend health benefits to socio-economically disadvantaged communities and can be a potential source of support for those who are exposed to conditions that worsen their health and well-being. Weather events, as established, are a major source of distress for many including informal, outdoor and migrant workers. However, their access to welfare schemes that help them cope with such impacts is low and full of challenges. It is important to unpack these hurdles, understand their roots and work on smoothing the processes to enable better access and enhance coping capacities.

Barriers to Availing Benefits

During weather events, under emergency health conditions, infrastructural issues – such as a shortage of beds, equipment, medicines, staff, other healthcare facilities and poor crowd management, etc – were observed in accessing the scheme benefits, leading to major losses for migrant and other informal workers. Studies show that migrants and informal workers have to spend a lot on health expenses due to their increased exposure during weather events like heatwaves.³⁷ The Ayushman Bharat scheme has been a required addition to the social security landscape in India to ensure the health and well-being of the most vulnerable communities. Effective implementation and outreach to those most in need, calls for identifying and addressing both demand and supply side challenges.

Demand Side Challenges: Awareness and Access

In the scheme, four demand side challenges were identified –

1. Limited awareness about the scheme.
2. Limited awareness of mechanisms around accessing the scheme.
3. Refusal or challenges in access leading to disillusionment among vulnerable communities.
4. Delays in service provision and perceptions of government hospitals creating access barriers.

1. Limited awareness of the scheme

Limited knowledge dissemination which is leading to lack of awareness among vulnerable communities still remains a significant barrier to availing the scheme benefits. A 2025 study based in Gautam Buddha Nagar, Uttar Pradesh, indicated that only 9% of the sample in urban areas and 19% in rural areas were aware of the scheme, while an even lower proportion of people knew about the process of availing the benefits.³⁸ During FGDs, workers mentioned a keen interest in availing the scheme but a lack of information on benefits and diseases covered under the scheme impeded their ability to do so.

2. Limited awareness of measures to access the scheme

The government's current priority lies in the creation of Ayushman cards to cover the entire SECC database and hence has taken measures to fast-track the card issuing process, however, minimal hands-on efforts have been made to share complete information around their utility, empanelled hospitals and the process of availing benefits.³⁹ Many workers mentioned during discussions that even though they had Ayushman cards, they didn't understand the benefits they could avail under them or how to use these cards or identify empanelled hospitals in their vicinity, which delayed or hindered the timely and effective claiming of the benefits under the scheme.

Although there have been some positive efforts (Box 2) when it comes to vulnerable communities, due to barriers such as low education and technology literacy levels, these efforts on the ground haven't translated into greater usage. A survey in Bengaluru's urban informal settlements highlighted that approximately 10% of the surveyed households used the Ayushman Bharat Arogya Karnataka scheme. Apart from that, only one-third of the households were aware about of primary healthcare centre or Namma clinic near their residence, and of them only 39% visited these facilities in case of health-related problems.⁴⁰



“We have heard of Ayushman Bharat but never really understood how to get it or use it. If someone guided us properly, we might register. Right now, we just depend on nearby clinics”

Puja, Construction worker

Box 2: Government efforts to spreading awareness of Ayushman Bharat

- One initiative taken by the government is conducting Ayushman Sabhas at the panchayat or ward level to spread information about the scheme, facilitate card creation, distribution of cards, etc.⁴¹
- Central and state helplines have been created for the scheme, beneficiaries can use these helplines to register their queries.^{42 43}
- The National Health Authority (NHA) is also working on a proposal to use Fair Price Shops or Ration shops for providing information related to the scheme and entitlements under the scheme to eligible beneficiaries.⁴⁴
- NHA undertakes several Information, Education and Communication initiatives to generate awareness about entitlements, but Karnataka has not established an IEC Cell.⁴⁵

While these efforts exist, they are not yet climate-responsive or specifically designed to reach migrant workers in high-risk informal settlements in cities.

3. Refusal during access to the scheme

Workers when faced with hurdles in accessing a scheme, generally tend to become disillusioned with receiving any benefit under the scheme altogether, leading them to be unwilling to access it again. Anecdotal evidence from our FGDs by Seema, a female worker, revealed the denial of services by the hospital for a particular illness. In many cases, it is also seen that not all hospitals cover all listed diseases, which often leads to these confusions and delays in access.

”

“I registered for the Ayushman Bharat insurance scheme with the help of an NGO. When I had a uterus issue, the government hospital refused to treat me and asked me to go to a private one. We had to shift immediately, and it cost us a lot. It was a terrible experience”

Seema, Domestic Worker

4. Delay in service provision and infrastructural issues reducing access

Another aspect was the complete refusal to undertake any treatment at government hospitals due to previous experiences of delay in service provision, infrastructural issues to address certain illnesses, and the treatment of patients. Therefore, workers prefer to go to private hospitals to prevent long waiting times and poor treatment from public hospital staff. They also reported recovering faster and returning to work sooner, as their healthcare needs are catered to early on. In periods of extreme heat or post-flood disease spikes, where workers need urgent health support, delays due to infrastructural inefficiencies in terms of the quality and quantity of facilities like beds, equipment, medicines, rooms, and overworked staff who are disproportionately assigned to a large number of patients materially increase health risks and undermine the protective role of the scheme.

”

“I prefer private hospitals because in government ones, the waiting time is too long and the staff treat us poorly. We come from rural backgrounds, and they don't treat us with respect. Even though private hospitals are expensive, we recover faster and can return to work”

Reena, Construction worker

Supply Side Challenges

Demand side challenges are directly or indirectly linked to supply side challenges, causing barriers in access and awareness leading to lower demand. In supply side challenges, we look at four issues –

1. Challenges at the point of delivery.
2. Registration and technical challenges.
3. Limited capacity of the scheme to meeting demand.
4. Probable inefficiencies in budget allocations.

1. Limitations at the point of delivery

Ayushman Bharat covers some illnesses which occur during extreme weather events such as climate-related illnesses⁴⁶ directly or indirectly like heat stroke, dengue, malaria and respiratory failure/issues, however, this coverage is only for severe hospitalisation cases.⁴⁷ Vulnerable families, who are generally more exposed to weather events experience varied levels of symptoms due to weather events from minor infections which may not always require hospitalisation. All of these out-patient department health needs are not covered under PM-JAY. Even though they can be addressed by accessing medical assistance from Community Health Centres/Arogya Mandirs or by buying over the counter medicines from Jan Aushadhi Kendras, these available services are not always up to the mark. In a survey, 85% of the urban out-patient department respondents mentioned being not satisfied at all with the services at district hospitals. Reportedly the infrastructure within CHCs and PHCs was not good enough to address health issues.⁴⁸ A study on Bengaluru noted that more than 200 Jan Aushadhi Kendras existed in the city, but barriers due to quality concerns and supply shortages were rampant.⁴⁹

2. Documentation and registration issues

One key reason that impedes the registration of workers within the scheme is the database used for standardising eligibility for PM-JAY, the Socio-Economic and Caste Census 2011, which was already more than seven years old at the time of the scheme's inception. This makes the database for registration under the scheme vulnerable to many exclusion errors of people who should actually be eligible and includes many whose socio-economic status might have improved since. Apart from that, the Beneficiary Identification System for tracking potential beneficiaries has multiple inconsistencies when mapped to the SECC database.⁵⁰ Additionally, due to the changing nature of their location, housing, employment and socio-economic conditions, migrant workers may find it much more difficult to register for the scheme, increasing challenges in access. Apart from these, technical and manual issues within the existing systems which lead to rejection of applications and affect service delivery, are also a challenge.

3. Insufficient capacity for meeting demands

Based on government data, there are 17,000 public hospitals and 15,500 private hospitals providing PM-JAY benefits nationally. Out of all empanelled hospitals, more than 21,000 have less than 50 beds.⁵¹ An average of 48 beds per empanelled hospital has been estimated.⁵² At the end of 2024, the government said there were 36 crore verified beneficiaries, which means approximately 4 beds per 1000 beneficiaries.⁵³ In terms of global OECD recommended standards, these numbers compare well i.e., 4.2 beds per 1000 people. However, in some more healthcare advanced countries such as Japan and Korea, have more than 12 beds per 1000 people are recommended and followed standards.⁵⁴ In Karnataka, approximately 1.89 crore cardholders are enrolled in the state under the scheme and there are about 3600 empanelled hospitals in the state⁵⁵, which means that for every 10,000 cardholders, there are approximately 2 empanelled hospitals. These numbers might be better for Bengaluru since, with higher population density, more health facilities would be located in the city. It should be noted that these numbers do not include inter-state migrants. However, recent news reports mention that more than 25% of the empanelled hospitals are inactive in the country, with about 500 active hospitals per 1 crore beneficiaries in Karnataka.⁵⁶ These numbers, although much better than overall country averages, are still not sufficient when infrastructural issues are considered. This insufficiency is recurrently reflected during extreme weather events or disasters, for instance, during floods in Uttarakhand in 2021, an assessment report revealed that health issues were largely aggravated due to lack of staff, drug shortages, and damage to hospital buildings.⁵⁷ There is a need for focused work on preparedness, specifically to address the increasing frequency of extreme weather events and their heightened impacts on vulnerable/exposed groups.

In recent years, many private hospitals have been dropping off from the scheme due to delays in reimbursement from the government because of increased vigilance around anti-fraud.⁵⁸ This has induced much reluctance in providing treatment to Ayushman cardholders.⁵⁹ Delays in claim settlements are noted as one of the key reasons for this – in Karnataka, a CAG report (2023) observed that more than 1.8 lakh cases took over 12 hours for pre-authorisation of claims, which should not take more than 6 hours.⁶¹ On the other hand, public hospitals are overcrowded, underfunded and have insufficient infrastructure to address the healthcare needs.⁶² All in all, the sheer size of the beneficiary pool, compared to the current limited capacity of the small number of the empanelled hospitals may not be adequate to meet the needs of the people. This would definitely become more strenuous when there is a weather event, and the health infrastructure experiences a large number of cases.

4. Budget allocation

PM-JAY is the world's largest publicly funded health insurance scheme. In the financial year 2025-26 alone, ₹9,406 crore was allocated to PM-JAY, and ₹7,300 crore was allocated in 2024-25.⁶³ As of January 2025, only ₹1.19 lakh crore has been authorised under this scheme for hospital admissions.⁶⁴ Overall, public health spending in the country has not been able to keep up with the increasing socio-economic growth or increasing health concerns, and the current allocations are not sufficient to meet national needs.⁶⁵ The NHA receives grant-in-aid from the Ministry of Health and Family Welfare (MoHFW) for the implementation of PM-JAY.⁶⁶ In the year 2020-21, when the entire PM-JAY budget was ₹6,429 crore, Karnataka received ₹145 crore for implementation and ₹15 crore for administrative purposes. In 2023-24, Karnataka was one of the states with the lowest proportion of allocation to health.⁶⁷ Since details around fund utilisation are limited, more transparent allocations for spreading awareness, incentivising the empanelment of hospitals, and building infrastructure could help in evaluating implementation processes within the scheme. Directing resources towards building structural climate-sensitive coverages and increasing coverage during weather events could help build the resilience of the affected groups.

Although there have been notable changes in Bengaluru with better services and improved infrastructure in primary healthcare centres⁶⁸, based on discussions with workers, we observe that most are left with going to nearby private clinics during health emergencies. Health expenses for doctor visits and over-the-counter medications add up, pushing many towards financial distress.

Recommendations for Action

Making Ayushman Bharat more responsive to extreme weather

A. Recommendation on inclusion of a climate-centric approach

- **Consider including out-patient department (OPD) facilities within the ambit of the insurance coverage of PM-JAY.** OPDs and medicines drive a large proportion of out-of-pocket expenditure, and these health needs are more frequent for workers exposed to extreme weather events. However, this might lead to a rise in costs for the government, for instance, Germany observed a rise in insurance premiums when the scope of statutory health insurance coverage was increased.⁶⁹ However, curbing illnesses at a less serious stage by extending outpatient treatment will reduce massive healthcare costs expended in secondary or tertiary services.
- **Through National/State disaster relief funds, free or subsidised emergency healthcare.** Recommendation seeks to provide PMJAY coverage for affected people. If an event has increased dengue, then it won't be covered under disaster relief fund, but any patient should be able to get the dengue treatment done using PMJAY when there is an event like floods, heatwave increasing the number of dengue cases.
- **Consider redesigning the scheme to formulate SOPs establishing hospital preparedness guidelines that address weather impacts on health so as to implement response measures.** For example, according to heat action plans⁷⁰ hospitals need to establish trained rapid response teams, allocate beds according to patient surge, etc. Such protocols could be inculcated by hospitals for all extreme weather events common to the area, as directed by the Ayushman Bharat scheme.

B. Recommendations on structural reforms in the scheme

- **Consider strengthening preventive care to drive down catastrophic expenditures by working on other pillars of the Ayushman Bharat Scheme.** Developing primary healthcare centres, and health and wellness centre infrastructure could help in decreasing dependency on costly private clinics. Increasing the number of Jan Aushadhi Kendras would provide easier access to affordable medicines. Consider the provision of telemedicine to ease consultation with doctors during emergencies like weather events when accessibility is affected.
- **Consider elevating the focus on the health infrastructure mission under Ayushman Bharat to increase the capacity** of existing empanelled hospitals to address healthcare demands. Additionally, consider incentivising the empanelment of private hospitals and prevent drop-offs off by ensuring timely and fair reimbursement processes.

4.2 Building and Other Construction Workers Welfare Board- Karnataka

About the scheme

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (commonly known as the BoCW Act) and the companion BoCW Welfare Cess Act, 1996, were enacted by the Government of India to protect the interests of workers employed in the construction sector. As per the law, every state and union territory is mandated to establish a Building and Other Construction Workers Welfare Board (BOCW Board) to register workers, collect cess, and implement welfare schemes of their respective boards.⁷¹ These Boards operate under the supervision of the respective State Labour Departments, while the Ministry of Labour and Employment, Government of India, provides policy guidance and model schemes. The Karnataka BoCW Welfare Board (KBoCW), constituted in 2007, offers a total of 15 schemes, which cover various aspects like health, education, housing, and financial security (For more information on BoCW check Figure 13 and Table 3 in appendix).⁷²

While these schemes address general worker welfare, they are not designed to respond to extreme weather risks directly. Given that construction workers are one of the most exposed to extreme weather events, they face impacts on their wages, health, houses, and other facets of life, as seen in Chapter 3, there is a growing need to understand and assess the current challenges within BoCW schemes and how they can respond to extreme weather risks through practical changes or modifications in design. These additions to make schemes climate responsive can be a credible and justifiable use of BoCW funds, which often go underutilised.

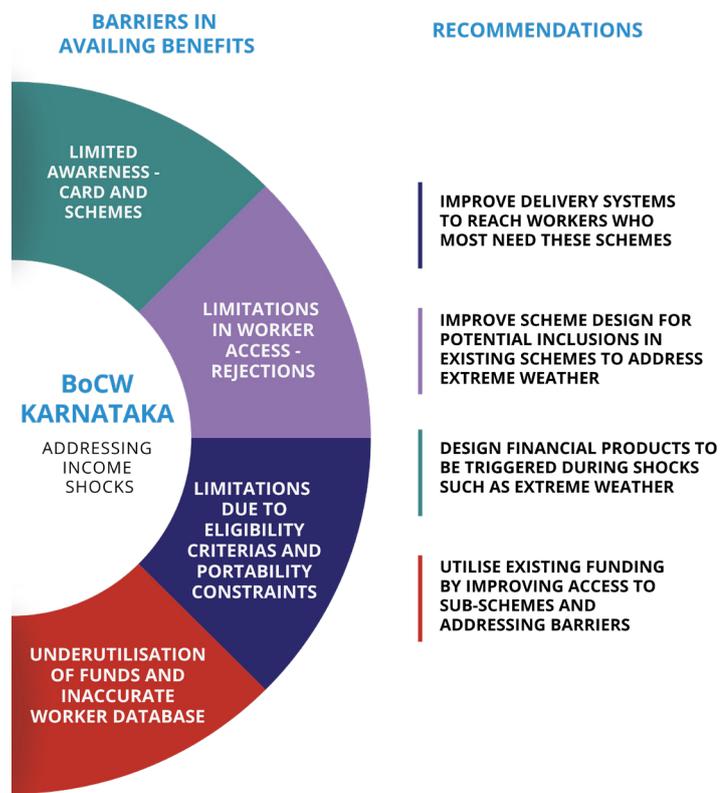


Figure 8: Overview of BoCW Karnataka: Access barriers and Recommendations

Barriers to Availing Benefits

The Karnataka BoCW provides essential support for construction sector workers, however, its effective implementation is impaired due to worker and system-related challenges.

Demand Side Challenges: Awareness and Access

The research observed three explicit demand side challenges –

1. Limited knowledge about BoCW Card and sub-schemes.
2. Limitations in access post rejection of applications.
3. Limitations due to the digital divide.

1. Limited knowledge about the BoCW Card and sub-schemes

Existing studies consistently highlight that construction workers have limited awareness of the BoCW Act and its welfare schemes. Many workers do not know what benefits are available, who is eligible, or how the labour card can support them.^{73 74 75} FGD findings reaffirm these gaps as workers expressed confusion and a lack of guidance regarding the BoCW card and its benefits. A recent article found that while there were 28.05 lakh construction workers in Karnataka, about 15.69 lakh (56%) had been registered by the board – these numbers exclude MGNREGA workers registered under a special drive by the board.⁷⁶ This highlights the gap between access. A rapid survey conducted in Delhi also found that there is hesitancy among workers to pay the official fee (ranging from Rs 20 - Rs 150) for card issuance because they aren't clear about the benefits they would get, reflecting low perceived value due to low information.⁷⁷ This low awareness means that workers are unable to make informed decisions about enrolling in BoCW or claiming benefits, creating the first barrier to the effectiveness of the scheme.



“We don't know much about how it (BoCW Card) actually helps or where to use it. Nobody has explained clearly what benefits we can get through it”

Ramesh, Construction worker

2. Limitations in access due to application verification and pendency

Even among workers who are aware of BoCW benefits, accessing and availing benefits remains a major challenge. Limited support during the application process, coupled with difficulties in obtaining and submitting documents required to establish eligibility for migrant workers, often slows down the application verification. As a result, many applications remain pending, with prolonged processing times and limited communication regarding status. This further leads to worker fatigue and discourages continued engagement with the scheme, despite formal eligibility.^{78 79} Consequently, by the time severe weather events disrupt work and income, many workers are no longer registered or motivated to pursue claims, undermining BoCW's potential as a shock-response instrument.

3. Limitations due to the digital divide

The shift to a fully digital process for both enrolment and scheme application – has added another layer of difficulty for many workers, as they lack access to smart phones and have limited digital literacy.⁸⁰ This highlights that access barriers are not only procedural but also technological, making it harder for workers to claim what is rightfully theirs.

Supply Side Challenges

Challenges faced by workers due to factors directly related to scheme design and its implementation are common within the scheme without a lack of uniformity across states. We look at three barriers here –

1. Difficulty in establishing eligibility.
2. Portability constraints.
3. Limitations due to discrepancies in databases and underutilised budgets.

1. Difficulty in establishing eligibility

Challenges in applications for BoCW cards in Karnataka: To register for BoCW, a construction worker needs proof of identity, residence, age along with a letter issued by a contractor/employer, a gram panchayat official, or a labour union official, citing that they have worked for 90 days.⁸¹ This particularly becomes challenging for migrant construction workers, as they are a highly mobile workforce and may not complete 90 days at a single site or location. Once they move to a new worksite or city, returning to obtain the necessary signatures and seals becomes difficult.^{82 83} Additionally, from an administrative perspective, verifying these certificates is also resource-intensive, often requiring physical site visits or follow-up phone calls, contributing to delays and pendency in applications. These documentation and verification requirements tend to disproportionately burden these most mobile, casual, and sub-contracted workers, who are less able to follow up on such processes. Notably, these are also the workers who are most exposed to climate risks such as extreme heat and rainfall due to the outdoor nature of their work. During or immediately after extreme weather events, when workers are dealing with wage loss and housing damage, these high transaction costs and tight timelines make it unrealistic for them to navigate multiple applications and documentation requirements.

Challenges due to scheme requirements: Even after successfully registering with the KBoCW board, workers must submit separate applications online to avail the benefit of welfare schemes, many of which have separate eligibility requirements and extensive documentation (Table 2).

Table 2: Examples of document requirements for KBoCW sub-schemes

BoCW Karnataka scheme	Document requirements
Medical assistance ⁸⁴	Proof of hospitalisation for at least 48 hours, multiple medical documents, employment certificate, form XXII-A and submission within 6 months of treatment.
Accident assistance ⁸⁵	Proof that an accident occurred during the course of employment, a disability certificate issued by a government or recognised hospital, FIRs or post-mortem reports (by the living nominee), employer issues form XXI-A and submission within one year of accident.

Benefit delivery for each scheme within BoCW follows specific conditions that create an additional layer of administrative burden for workers who already struggle with document availability, unstable employment, and limited digital literacy. Many of these sub-schemes, such as medical assistance and accident compensation, are directly linked to climate risks, including heat-related illnesses and injuries during extreme rainfall or flooding. However, even after applications are submitted, workers often experience further delays due to verification processes, limiting timely access to support when it is needed most.

2. Portability constraints in scheme design:

BoCW boards are constituted at the state level, and each state has its own registration systems, database, verification process, and list of documents.⁸⁶ Because BoCW Cess is collected and administered within each state, benefits can only be accessed by workers registered in that specific state. In order to access benefits, an inter-state migrant worker must register a fresh application with the BoCW board of the host state and provide documents required by that specific state board. For climate-affected migrant workers who move across states in response to employment opportunities and environmental stress, the lack of portability means that welfare entitlements effectively ‘reset’ with each move, leaving them unprotected during climate-related disruptions. However, the model welfare scheme under the BoCW Act attempts to address these constraints by giving each worker a unique identification number (UIN) that would work across states, the usage of a single national database by states, and uniform scheme eligibility criteria.⁸⁷ In August 2024 the Ministry of Labour & Employment (MoLE) launched a centralised BoCW Management Information System (MIS) portal to collect registration and benefit data from all state/UT BoCW Boards. The portal is intended to support portability, better tracking of cess funds and their utilisation and facilitate unified benefits for BoCW workers.⁸⁸

Recent evidence suggests that most boards across the country, including the Karnataka board, have not implemented the UIN system under the model welfare scheme. There is limited information on implementation of this mechanism by state boards. Implementation of the UINs could potentially lead to a national, portable safety net for construction workers, including those moving in response to climate and livelihood pressures.

3. Inclusion errors and underutilisation of fund:

The 2025 CAG audit report shows that the Karnataka BoCW welfare board has collected a large amount of money over the years. The report highlights that the board handled around ₹12,500 crore in total collections, payments, and investments between 2009-2010 and 2022-2023. A June 2024 court affidavit says that the board still has ₹6,700 Crore in bank deposits.⁸⁹ Compared to other states, Karnataka demonstrates a relatively strong utilisation rate of BoCW welfare funds. Between the period 2018-2019 and 2022-2023, KBoCW had about ₹10,154 crore for worker welfare and spent ₹6,198 crore, a utilisation rate of roughly 61%.⁹⁰ The audit also notes that expenditure has improved since 2020-2021, resulting in lower savings. However, despite this comparatively positive performance, a significant share of funds remains unutilised. Persistent challenges in verifying worker data, including a high number of fake or ineligible registrations, further constrain the board’s ability to fully and effectively channel benefits to genuine construction workers.^{91 92} This large idle corpus represents a significant, currently untapped opportunity to invest in climate-resilient housing, heat safety measures, and emergency income support for construction workers.

The challenges above reflect the current barriers in access to BoCW for workers in Karnataka which affect the demand and access to BoCW cards and their schemes for those who most need it. However, one challenge that continues to remain unaddressed for these workers is the impacts they face in the current scenario where the frequency and intensity of extreme weather are increasing. Neither the current BoCW schemes nor the new labour codes adequately recognise extreme heat, heavy rainfall, and flooding as systemic risks to construction workers income and safety.^{93 94}

As construction workers are one of the most exposed sectors of workers to extreme weather, it is essential that the board takes cognisance of the new upcoming challenges that they face as extreme weather further intensifies. With income impacts becoming rampant due to work shutdowns and household risks multiplying for workers, the funds within BoCW can be a major assistance during these periods of climate-induced distress. While national labour codes do not explicitly address these risks, state BoCW boards retain the mandate to design and implement context-specific welfare schemes, presenting a clear opportunity for Karnataka to develop climate-responsive welfare measures tailored to the realities faced by construction workers.

Recommendations for Action

Making BoCW sub-schemes more responsive to upcoming weather challeng-

- **Improve delivery systems to reach workers who most need these schemes:** Consider strengthening the portability of benefits across states by enforcing the mandate and ensuring that all registered workers receive a UIN. This could make access to benefits smoother for migrant workers.
- **Utilise existing funding by improving access to sub-schemes and addressing barriers:** Consider using existing funds more effectively by simplifying application processes, strengthening outreach in labour colonies and worksites, and reducing documentation barriers, so more workers can benefit from available schemes.
- **Improve scheme design for potential inclusions in existing schemes to address extreme weather.** These schemes address some of the impacts that workers are already facing, targeted climate-responsive inclusions could significantly strengthen their ability to protect workers during weather-related disruptions. For example,
 - The **medical assistance sub-scheme**, could cover heat-related illnesses, and the Mobile Healthcare Units could further expand screenings to include heat-related conditions and increase their outreach, especially during heatwaves and heavy rainfall periods.
 - The **housing support scheme** could provide additional financial assistance for climate-resilient designs such as cool roofs, ventilation upgrades, and repairs after heavy rains and/or floods. These measures directly address indoor heat stress and recurrent monsoon-related housing damage reported by construction worker households.
 - Under **the toolkit and training program**, the board could add additional training modules on heat safety, hydration, and first aid for heat illness. They could also explore the provision of cooling gear such as reflective vests, cooling towels, and helmets.
 - **Consider mandating minimum heat-safe infrastructure at construction sites through BoCW advisories**, including shaded rest areas, drinking water, and ORS points, basic first-aid kits, and access to toilets—particularly for women workers. These could be treated as enforceable welfare provisions under BoCW guidelines, with compliance monitored through site inspections and labour officers during peak heat months.
 - **Integrate gender-responsive infrastructure and protections within BoCW climate-responsive measures**, recognising that women construction workers face compounded heat risks due to physically demanding tasks, inadequate sanitation, and lack of rest spaces. BoCW-funded interventions could mandate access to gender-segregated toilets, shaded rest areas, drinking water, and menstrual hygiene facilities at worksites and labour settlements.
- **Design financial products to be triggered during shocks such as extreme weather:** BoCW could consider introducing a weather-triggered emergency cash transfer mechanism, whereby registered workers automatically become eligible for rapid financial assistance when the India Meteorological Department (IMD) or local authorities officially declare a heatwave, extreme rainfall, or flood event, which usually tend to lead to wage loss for workers. This model, similar to the wage compensation provided during air pollution related construction bans in Delhi, could help workers cover immediate needs and manage sudden loss of wages when work stops.
- **To strengthen anticipatory protection, BoCW benefit delivery should be linked with early warning systems and city-level climate planning processes, including Heat Action Plans.** Formal coordination with the IMD alerts and municipal authorities would enable timely activation of rest protocols, medical outreach, and income support during extreme heat or rainfall events, shifting BoCW from a reactive welfare mechanism to a frontline climate-responsive institution.

These measures can be piloted in select high-risk urban areas before wider rollout, allowing BoCW Boards to test climate-responsive delivery models, inter-departmental coordination, and early warning-linked benefit delivery. City-level demonstration pilots would generate operational evidence and cost benchmarks to inform scalable BoCW reforms.

4.3 Public Distribution System and Anna Bhagya Yojana

About the scheme

The Public Distribution System (PDS), which falls under the National Food Security Act, 2013, is a mechanism to address concerns on food insecurity in India.⁹⁵ Within PDS, 75% of the rural population and 50% of the urban population are entitled to highly subsidised food grains under the Antyodaya Anna Yojana.⁹⁶ PDS also offers a portability mechanism under its ‘One Nation One Ration card (ONORC)’ initiative which ensures continued access to ration support to migrant workers even when they move to destination locations out of their home district.

In connection with PDS, the Government of Karnataka launched the Anna Bhagya Yojana in 2013, which was relaunched again in 2023. This scheme aims to achieve similar objectives such as accelerating hunger alleviation goals and helping manage food costs for financially vulnerable groups. This scheme promises provision of an additional 5 kgs of rice per person per month, over and above PDS allocations to Below Poverty Line (BPL) Households, Priority Households (PHH), Antyodaya Aay Yojana (AAY) cardholders. During rice shortages within the state, the scheme temporarily provides cash transfers at the rate of ₹34 per kilogram of rice, i.e., ₹170 per person per month, as Direct Benefit Transfer (DBT). (For more details, check Figure X in Appendix).^{97 98}

PDS and Anna Bhagya are key schemes that can tackle food insecurity, which based on our survey, was predominant impact in Bengaluru and across India during extreme weather events. Especially for migrant households in urban Karnataka, where extreme rainfall, heat stress, and resultant work stoppages often reduce daily earnings and heighten food insecurity, these two schemes have the potential to act as key stabilisers. Their role becomes critical during climate-related disruptions, when food access, purchasing power, and mobility are simultaneously constrained. Existing allocations under PDS, along with additional support under Anna Bhagya, have already led to positive outcomes for some households.

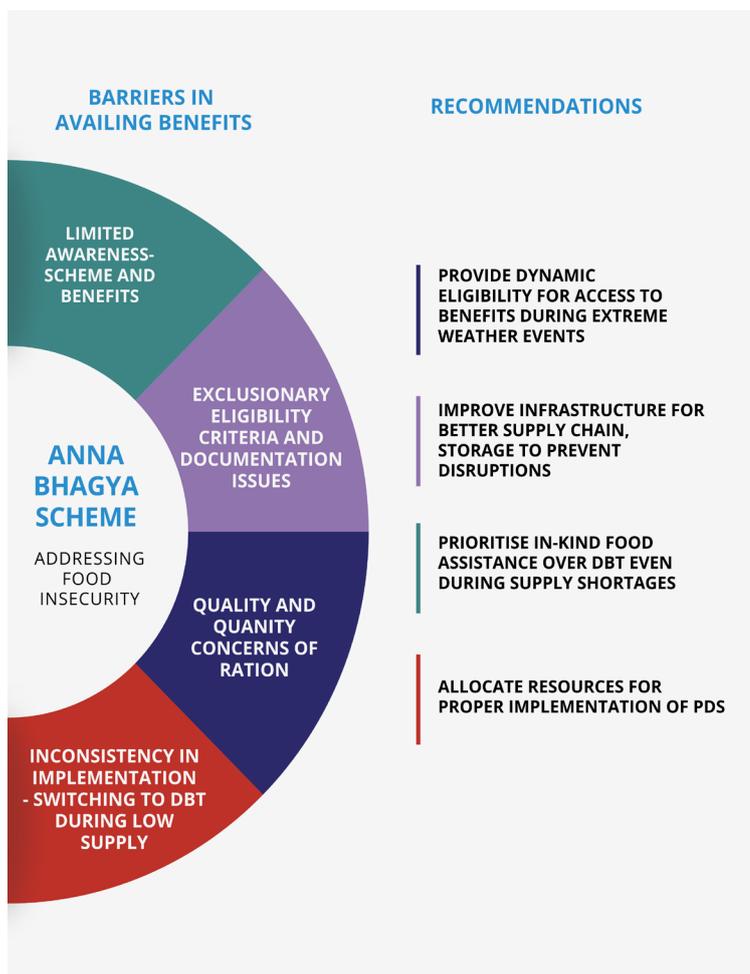


Figure 9: Overview of PDS & Anna Bhagya: Access barriers and Recommendations



“The rice we get helps us manage food costs, especially when work stops during rains. We sometimes also get soap and detergent along with it”

Ramesh, Construction worker

Barriers to Availing Benefits

PDS and Anna Bhagya are essential schemes for ensuring food security for vulnerable workers. Barriers to availing benefits under these schemes mainly exist within the scheme design and the allocations process on the supply side.

Demand Side Challenges: Awareness and Access

PDS, a flagship scheme of the central government, and Anna Bhagya, a Karnataka state scheme, have significant reach and awareness. All workers during discussions mentioned being aware of these schemes. For PDS, access was also significantly higher; however, most workers opted to take ration in their source locations rather than availing it at destination under ONORC. This was mainly due to either limited awareness of the partial uptake feature or the ration amount being just enough for their families back at source. Anna Bhagya saw some challenges of limited access even with high awareness, but this was mainly due to workers not meeting existing eligibility criteria. The findings are in line with existing evaluations done for PDS and Anna Bhagya.^{99 100} For instance, a government evaluation of the state scheme observed high levels of awareness (95%) about the scheme and its entitlements.¹⁰¹

However, even with high awareness, some obstacles were observed related to implementation and last mile delivery. Overall, what could potentially support extreme weather-affected households in dealing with food insecurity, often remains out of reach, thereby not meeting the scheme's central goals for some vulnerable groups.

Supply Side Challenges

The supply chain for ration distribution, from the Food Corporation of India to the Central Government and down to the lower bodies, faces operational issues, leading to challenges in access for workers. Here, we discuss two challenges with respect to both PDS and Anna Bhagya –

1. Limitations due to existing eligibility criteria.
2. Insufficient supply, leading to challenges in meeting demand under Anna Bhagya.

1. Limitations due to eligibility criteria

The scheme design of Anna Bhagya primarily targets permanent residents of Karnataka and those who hold BPL/PHH/AAY ration cards, leading to the exclusion of many vulnerable workers who could benefit from the extra allocation.¹⁰² An intra-state migrant group during discussions mentioned they could not get access to additional ration under the scheme since they didn't hold AAY cards, which are a requirement for eligibility to receive the benefits. In addition to this, inter-state migrants, usually the most vulnerable, during the FGDs mentioned they did not receive access to Anna Bhagya as they are ineligible under the current criteria. Upon being asked about receiving ration under PDS, they said they had to spend out of pocket for food expenses in Bengaluru. Although PDS allocations are portable across the country, apart from demand challenges, migrants still face operational hurdles in claiming benefits, which include lack of clarity in documentation guidelines, or expiry of ration card if not used for 3 months, hurdles in stock supply to fair price shops, etc.¹⁰³

In scenarios where households just above the poverty line are already facing financial vulnerability, and where any minor external shock can push them into falling below the poverty line, these criteria do not take into account such disproportionate socio-economic impacts. Missing out on the extra Anna Bhagya allocation due to these stringent, non-dynamic criteria limits the extension of valuable government support to communities in real need.

Moreover, when the Anna Bhagya scheme transitions to Direct Benefit Transfer during shortages in stock supply, many households do not receive the cash because their bank accounts are not linked to Aadhaar.¹⁰⁴ Many heads of households, to whose bank accounts the money is sent, are not used to banking processes, and in some cases, they do not have bank accounts at all, leading to further exclusions.¹⁰⁵



“We don't have Antyodaya cards. That is the reason we are losing so many benefits. No one is helping us with this”

Lalita, Construction worker

2. Insufficient supply leading to falsification of Anna Bhagya promises

A recent research study observed that grains were sometimes not available on specified dates under Anna Bhagya for nearly 90% of beneficiaries, while 70% complained about the quality of pulses.¹⁰⁶ News reports also show instances where beneficiaries received less than the allocated amount of food grains, causing distress.¹⁰⁷

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“We receive rice every month, but the quality is poor and the quantity is not enough. In our village, the ration was much better”

Lila, Domestic worker

Karnataka, in the past few years, has faced challenges in the procurement of food grains to meet the promised amount of rice under Anna Bhagya.¹⁰⁸ Shortage of food grains were reported as a factor contributing to low access,¹⁰⁹ largely rooted in poor inter-governmental coordination.^{110 111} As a result of not being able to meet this demand, the state government switched to Direct Benefit Transfer to compensate for the unfulfilled allocations at the subsidised rate of ₹34/kilo of rice per month per person, averaging to ₹583 per urban household every month.¹¹² Only 40% respondents in a study preferred cash over ration within Anna Bhagya Yojana.¹¹³ There were significant challenges in access to DBT for vulnerable communities, such as beneficiary bank accounts not being linked to Aadhaar, leading to reduced access.¹¹⁴ Naturally, this narrows the quantity of ration that beneficiaries are able to buy from markets.

Even with these challenges, those who have benefitted from the extra allocations of Anna Bhagya have reported positive impacts and better coping capacities. This shows that if implemented well, the scheme can aid many in addressing weather impacts and dealing with food insecurity. Even from FGDs, some workers mentioned the ability of extra allocations or cash under the Anna Bhagya scheme in providing support to cope with these impacts.

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“During heavy rains, it helped us feed our family when income was low. We didn't have to skip meals. Even though we do not get ration support regularly, we take money from our saving and spend it on ration”

Ashima, Construction worker

As established in chapter 3, the top impact of extreme weather events on households was food insecurity, and many cope by cutting food costs during weather events. Thus, food support - whether in-kind or as cash - is a major area requiring protection to help households manage heat and rain-related income disruptions. As climate shocks become more frequent, ensuring reliable, timely, and portable food support is one of the most immediate and cost-effective pathways to protect migrant and informal worker households from deepening food insecurity and financial distress.

Recommendations for Action

Ensuring improved access to Anna Bhagya scheme and aiding in building climate resilience

- **Consider providing dynamic eligibility for access to benefits during extreme weather events** to ensure Anna Bhagya benefits can be utilised by affected groups even if they do not fall under AAY, PHH, or BPL households. Expansion of coverage during weather events could prevent many households from being pushed into financial distress. For example, all flood-affected people in Kerala were provided free ration in 2018, including non-priority households.¹¹⁵
- **Prioritise in-kind food assistance over DBT.** Since the main goal of the Anna Bhagya scheme is to address food insecurity, providing food grains directly could be more effective than cash transfers. The amount disbursed under DBT reflects the subsidised rate, which is not enough for the procurement of the full quantity of food grain that beneficiaries are entitled to. In case of supply shortages, switching to temporary grain diversification may be considered.

4.4 Gruha Jyothi Scheme

About the scheme

Gruha Jyothi is a flagship electricity subsidy scheme launched by the Karnataka State Government to reduce the financial burden of electricity bills on households, particularly low-income and socio-economically disadvantaged households.^{116 117} Under this scheme, eligible households in Karnataka can receive up to 200 units of free monthly electricity, significantly lowering monthly expenses and helping improve living standards.¹¹⁸

Importantly, the Gruha Jyothi scheme is applicable to tenants in addition to homeowners. Tenants can avail of the electricity subsidy even when the electricity bill is in the name of the house owner. They can receive the benefit by submitting a valid address proof for the premises, which may include a rental or lease agreement or a voter id reflecting the address, along with Aadhaar details linked to the concerned electricity connection.¹¹⁹ By explicitly enabling tenant eligibility through address-based verification rather than ownership of the electricity meter, the scheme enhances access for migrant and rental households.

While not explicitly framed as a measure that responds to extreme weather impacts, Gruha Jyothi has strong potential to act as a safety net for workers who face financial distress due to increasing electricity costs during the summer months in the city. In this context, Gruha Jyothi becomes an important scheme to assess, given its focus on reducing monthly electricity expenditures and easing household financial stress during peak summer months.¹²⁰

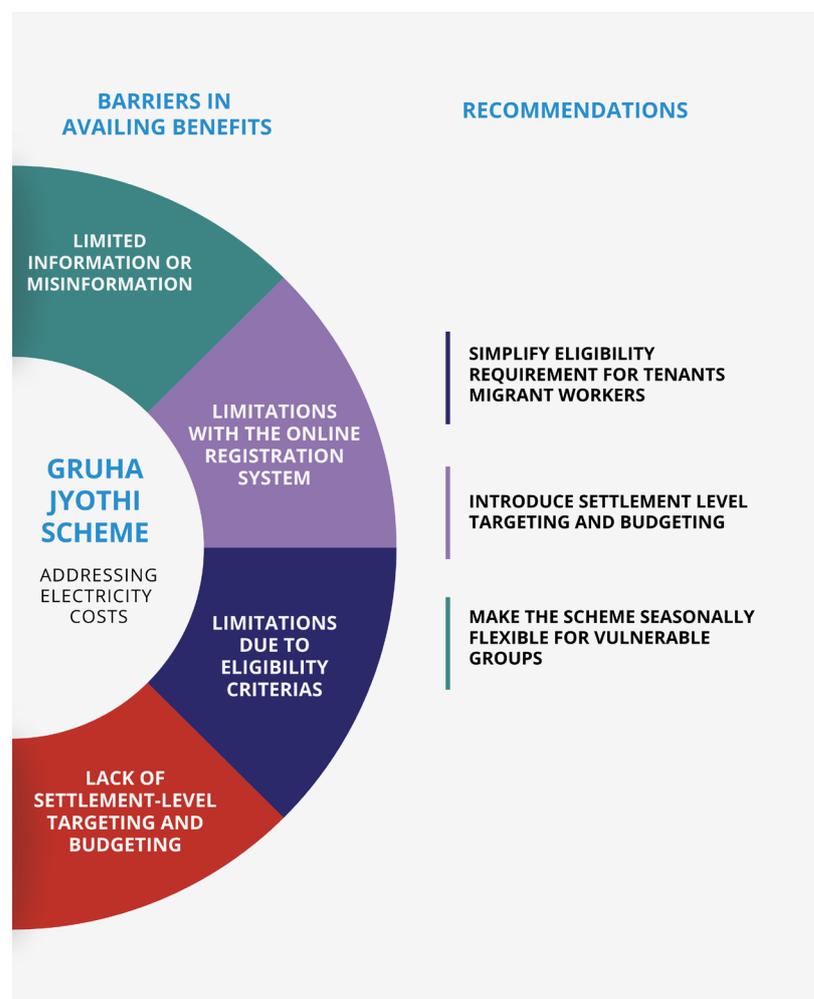


Figure 10: Overview of Gruha Jyothi Scheme: Access barriers and Recommendations

Barriers to Availing Benefits

Schemes like Gruha Jyothi, which address smaller components of distress for workers during extreme weather events, are important examples of how existing measures can reduce the increasing burden on these communities. Improved access, by addressing demand and supply related challenges, is essential for effective support.

Demand Side Challenges: Access

Even though many people know about the scheme, several problems prevent them from availing the benefit. During discussions with workers, awareness about the scheme per se wasn't a challenge, but rather the gap in understanding processes for availing benefits under the scheme.

1. Challenges in availing scheme due to limited information or misinformation:

Many workers who were eligible to access the benefits of this scheme mentioned being unclear about the eligibility rules, especially with respect to tenant eligibility. During discussions, we observed that a large proportion of workers were not aware of the process of registration. Sangeetha, a domestic worker shared, and others agreed, *"We are not aware of how to register. Electricity connections are in the landlord's name, not ours."* In addition, as most of these workers live in informal settlements on rent and have electricity registered under the landlord's name, they are often unaware of whether any benefits are reaching them. In some cases, landlords take the subsidies but don't inform workers. Seema, a domestic worker mentioned *"We pay the landlord every month for electricity. We don't get the subsidy directly."* This challenge is closely connected to the fact that, in most informal settlements, a single combined electricity meter is used for the entire building. As a result, a single electricity consumption bill is issued for the entire building, with landlords usually residing on the premises. This leads to much higher consumption levels than the subsidy threshold. Parvathi, a domestic worker shared, *"For every 10 houses, there is one meter. We share the bill equally, so subsidies don't help us at all."* This sharing of meters made the zero bill benefit practically unreachable even when individual tenants consumed little electricity.¹²¹ This gap in access becomes especially consequential during heatwaves, when households need to operate fans and coolers more intensively but have no control over billing or subsidy flows.

Supply Side Challenges

Challenges related to supply lead to decreased demand. In this section, we look at the three administrative barriers which need to be addressed for effective implementation of this scheme –

1. Limitations with the online registration system.
2. Limitations due to eligibility criteria.
3. Lack of settlement-level targeting and budgeting.

1. Limitations with the online registration system:

One of the major issues with Gruha Jyothi has been the online registration process, as it requires applicants to register through an online portal. The portal often faces technical problems, due to which many households struggle to complete the registration.¹²² For people who depend on daily wages or have limited digital access, these delays become a serious barrier, as they end up going to local printing or xerox shops, which charge extra money to complete the process. This adds an extra cost and makes the scheme difficult to access for low-income and migrant households.¹²³

2. Limitations due to eligibility criteria

Multiple eligibility criteria within the scheme design lead to low access for workers. To register for the Gruha Jyothi scheme, an applicant needs to show an Aadhaar card, and the electricity connection details (consumer or account ID). Tenants also need to provide a rental agreement or some proof that they are living in the house. The online application uses Aadhaar-based OTP verification, so applicants must have a mobile number linked to Aadhaar. Applications are submitted through the state's digital portals and service centres like Seva Sindhu, Grama One, or Karnataka One.¹²⁴ In many cases, the lack of easy portability of the subsidy from one rented house to another also leads to the loss of these subsidies. Because of multiple paperwork and digital requirements, many tenants, especially migrant workers, find it difficult to complete the application process or make these shift adjustments. This often leads to workers forgoing such subsidies, as migrant households may not have the time or documents needed for repeated visits.¹²⁵

3. Lack of settlement-level targeting and budgeting:

Bengaluru has about 597 slums, of which 387 are notified.¹²⁶ Many migrant workers live in these slums or informal settlements, however, there isn't any official data available in the public domain on the proportion of Gruha Jyothi beneficiaries from these settlements. The absence of informal settlement-level targeting of beneficiaries can be considered as a major supply side gap, making it difficult for the state to assess whether the subsidy is reaching the most vulnerable groups. Additionally, the Gruha Jyothi budget for 2025-2026 is ₹10,100 crore, yet it remains unclear how this allocation accounts for households in settlements.¹²⁷ Without explicit targets or budget allocation for informal settlements households, the scheme excludes those who need free electricity the most. Given that informal settlements consistently record higher indoor heat levels due to tin roofing, dense layouts, and limited ventilation, the absence of settlement-level targeting means that households facing the most severe heat stress remain structurally unsupported.

Unlike Anna Bhagya or Gruha Lakshmi, most workers we spoke to did not directly benefit from Gruha Jyothi, despite being aware of it. They faced structural barriers related to rental housing, shared meters, and documentation. However, there is a clear climate relevance to this scheme as electricity usage rises sharply during summers due to households running fans and coolers for longer hours. Migrant workers living in tin-roofed or poorly ventilated homes face higher indoor temperatures. Free electricity up to 200 units could significantly reduce heat-related financial burdens if accessible to them. However, the existing barriers that impede their access, i.e., no control over their household meters or access to formal rental documents, mean that the scheme's benefits rarely reach the very households most exposed to heat stress. If redesigned with the realities of migrant tenancy and urban heat exposure in mind, Gruha Jyothi could evolve from a general welfare subsidy into a targeted climate-adaptation instrument for some of Bengaluru's most heat-vulnerable households.

Recommendations for Action

Making Gruha Jyothi more accessible for workers

- **Simplify eligibility requirements for tenants, especially migrants:** The scheme could consider relaxing and simplifying eligibility requirements, especially for tenants or migrant workers who often lack legal rental agreements or Aadhaar-linked mobile numbers. The state could consider a self-declaration-based mechanism for tenants—similar to models used in urban service delivery elsewhere—to ensure that the lack of formal rental agreements does not become an exclusion point, or other authentication mechanisms such as face, iris, or fingerprints-based verification.
- **Introduce informal settlement-level targeting and budgeting:** To ensure the scheme reaches the most vulnerable, the government could ensure settlement-level targeting and budgeting. Currently, Bengaluru's informal settlements are not explicitly mapped within the Gruha Jyothi scheme. This could be done through settlement-level application reporting and allocating a portion of the scheme budget for these settlements, as well as integration of hazard -vulnerability mapping (HRVA) at the ward level which could help prioritise high-exposure clusters for targeted interventions. This could help ensure that the subsidy reaches the households who need it the most.
- **Make the scheme seasonally flexible for vulnerable groups:** The scheme could also adopt seasonal flexibility to account for the sharp rise in electricity consumption during summer months, which often causes households to lose the zero-bill benefit. To prevent this, the government could consider increasing the upper limit for electricity consumption for low-income households during heat months. Such flexibility could ensure that the most heat-exposed households, particularly those living in tin-roofed or poorly ventilated houses, continue to receive support when they need it the most.

4.5 Gruha Lakshmi Yojana

About the scheme

Introduced in 2023, Gruha Lakshmi is a flagship welfare scheme by the Karnataka state government aimed at empowering women by enhancing financial independence, reducing economic vulnerability at the household level and supporting daily consumption needs. The scheme provides ₹2000 per month to women who are head of households holding BPL, or APL, or AAY ration cards.¹²⁸ With a budget of ₹28,608 crore for the period 2024-2025, the scheme benefited 1.22 crore women beneficiaries.¹²⁹

While the Gruha Lakshmi Scheme is not designed explicitly as a climate-responsive safety net, emerging evidence from focused group discussions shows that the regular cash transfer has worked as an important support during periods of extreme weather. This scheme can potentially provide support to households for urgent needs and help them cope with increasing costs during extreme weather events. Therefore, in this scheme, we look at current access barriers and recommendations for better implementation and design to support communities during climate shocks.

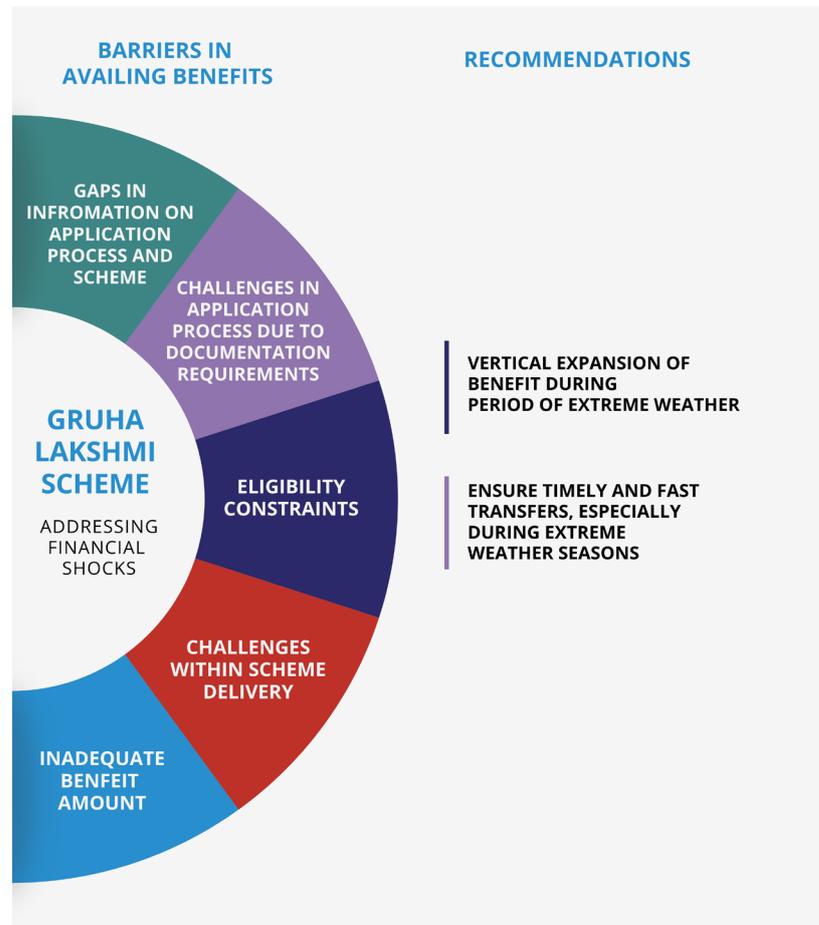


Figure 11: Overview of Gruha Lakshmi Scheme: Access barriers and Recommendations

Barriers to Availing Benefits

Although Gruha Lakshmi has seen very high awareness and uptake due to government outreach and rapid implementation, challenges persist in both access and regular benefit delivery.

Demand Side Challenges: Access

Even though overall scheme awareness was significantly high among female workers regarding this scheme, complexities and challenges in the application process were leading to female workers not accessing the scheme.

1. Gaps in information on application process and scheme:

The Gruha Lakshmi scheme was one of the five guarantee schemes first introduced as pre-election commitments before the Karnataka May 2023 polls. Following cabinet-level approval, the scheme was rolled out quickly in June 2023, supported by strong early mobilisation and a focused state administrative effort.¹³⁰ A study by Indus Action found that awareness levels were significantly high, with most eligible women familiar with the scheme and its benefit amount.¹³¹ Our FGDs reflected similar patterns. Most women workers were aware of the scheme and some reported having received the monthly transfer directly to their bank accounts. However, some women reported gaps in their understanding of required documentation and the application process. Gaps were also noted in the level of awareness about the amount that women are entitled to.¹³²

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“Many of us don’t have ration cards, which are required for registration. We don’t fully understand the process, and no one helps us.”

Sita, Construction Worker

2. Challenges in application process due to documentation requirements

Women who had not been able to register were unable to do so due to documentation issues. The scheme’s reliance on direct benefit transfer means linking Aadhaar with a bank account, KYC compliance and demographic verification; mismatches or failed authentication resulted in many eligible applicants being left out.^{133 134} Application rejections were leading to workers refusing to attempt to access the scheme again.

Supply Side Challenges

We found that to access the scheme, female workers faced three challenges that impaired access. These included –

1. Eligibility constraints leading to large populations being left out.
2. Challenges in scheme delivery causing delayed payments without any means for recourse.

1. Eligibility constraints

The scheme restricts eligibility to women who are not formally recorded as heads of BPL households. Many intra-state migrants and low-income women noted that household documents often list male members as heads, even when women manage household finances.

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“Some don’t have complete documents or don’t know the process. Many women aren’t listed as heads of households. That’s why they don’t get it.”

Seema, Domestic worker

2. Challenges within scheme delivery:

A major barrier reported by FGD participants was the irregularity of transfers over the past 3-4 months. Women noted that payments had stopped without explanation, causing distress, especially as they began to rely on the monthly support for essential household expenses. These interruptions undermine the scheme’s ability to function as a support, particularly during extreme weather seasons. The lack of grievance redressal mechanisms to report these delays or individual challenges within the scheme was another challenge.

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“It helps a little, but ₹2000 isn’t enough. If it came regularly, it would be a real support.”

Rajshree, Sanitation worker

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“I am registered, but my neighbour hasn’t received the money yet due to document issues. For me, it came on time. We don’t know where to go to resolve this issue.”

Lalita, Construction Worker

Existing literature shows that women tend to use the cash transfers for essential household needs.^{135 136} Our findings from FGDs echo these patterns. Women reported using the transfer to cover food cost, medicines, bills, and meeting children's needs, etc. Many emphasised that the benefit became important during periods of extreme weather, when work stopped and wages were disrupted.

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“During heavy rains, the money helped us buy food when there was no work.”

Sita, Construction Worker

During the summer months, women reported using the money to buy extra water cans, purchase fans, and pay electricity bills. During the rainy season, the transfer helped women manage expenses when income dropped, they used the additional money to repair leaking roofs and meet urgent household expenses without borrowing money. For women, this assistance provided confidence and helped them in managing small but critical expenses when wages stopped.

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“Even small amounts help during difficult times. It gives us mental relief knowing something is coming,”

Rajshree, Sanitation worker

In some ways, this scheme acted as an anticipatory relief for female workers and their households during extreme weather events, providing a much-needed safety net to increase their ability to cope. However, there were instances where beneficiaries mentioned that, especially in urban or peri-urban areas, this benefit fell short especially during external shocks as a result of rising costs.

”

“It helps a little, but ₹2000 isn't enough. The amount should increase during rainy or summer months, and payments should come on time. That would help a lot.”

Reena, Construction worker

Although Gruha Lakshmi is primarily designed to support women's economic empowerment and financial independence, it lacks an explicit climate-responsive lens. However, FGD findings show that women are using the cash transfer to cope with climate-related disruptions, like managing household expenses during wage loss caused by heavy rains, or using it to cope with impacts of heat, indicating an informal climate coping support. If strengthened through timely delivery, seasonal top-ups, and inclusive documentation norms, Gruha Lakshmi could evolve into an important component of Karnataka's climate-responsive social protection architecture—offering women predictable support during increasingly frequent weather disruptions.

Recommendations for Action

Building financial resilience during climate shocks through Gruha Lakshmi

- **Vertical expansion of benefits during periods of extreme weather:** Introducing seasonal or crisis-linked top-ups through vertical expansion⁶ could strengthen the climate responsiveness of the Gruha Lakshmi scheme. This would allow the scheme to provide additional support during periods of extreme heat or rainfall or flooding, which are common in Bengaluru's low-lying areas. Such seasonal top-ups could help households manage income loss, cover health expenditures, and damage-related costs to essential household items during extreme weather events. FGD participants also suggested increasing the benefit amount during the summer and monsoon months.
- **Ensure timely and fast transfers, especially during extreme weather seasons:** The government could ensure timely and fast transfers. Delayed payment reduce the scheme's ability to act as a climate safety net. Participants during FGDs also emphasised that receiving regular payments, and before the onset of extreme weather seasons, can help them prepare better.
- **Strengthen grievance redressal mechanisms for effective problem-solving for beneficiaries:** The government could ensure that these mechanisms are more effective to support women workers when faced with barriers in accessing the scheme. Women workers in the FGDs mentioned that they did not know who to reach out to when faced with challenges in applications or delayed payments.

⁶ Vertical expansion means covering the same people more in depth and with higher benefits. It involves increasing the value, duration or levels of benefits for existing beneficiaries of a program.





Chapter 5

Conclusion



Extreme weather events and their impacts continue to heighten the vulnerabilities of the informal workforce and migrant workers, who are among the most exposed to them. Social protection can be a powerful tool to ensure their wellbeing. Adaptive social protection, an important tool combining social protection, disaster risk reduction and climate change adaptation, can support communities more effectively to withstand the challenges they face in their present and near future. Following a multi-pronged approach by ensuring workers are better prepared, can cope and adapt during crises or shocks, is essential for enhancing worker wellbeing and strengthening their resilience to impacts of extreme weather. For example, for preparedness, index-based insurance during extreme weather events, when inbuilt into systems, can support communities; pre-existing social registries of workers, when used for cash or in-kind help during disasters, could ensure coping; and long-term planning, such as livelihood diversification for better adaptation, can allow them to prepare for impacts. These together can build a strong infrastructure to support workers.¹³⁷

It is undeniable that the current social landscape in the country strives to protect its most vulnerable population. It seeks to safeguard vulnerable populations through income support, food security, health coverage, and essential services. Many of these schemes—though not explicitly climate-responsive—already function as de facto safety nets during heatwaves, heavy rain, and flood-related disruptions. Strengthening climate sensitivity within existing schemes offers a more feasible and scalable pathway than creating entirely new programmes. However, a persistent gap remains between coverage and actual access, particularly for migrant workers who face documentation, portability, and digital barriers. Addressing these access gaps is central to ensuring that existing schemes can operate as effective, shock-responsive safety nets for workers.

As heat, intense rainfall, and flooding intensify and make cities like Bengaluru increasingly vulnerable, safeguarding the city's informal and migrant workforce becomes essential. These workers sustain the city's construction, services, logistics, and care economies, yet they bear the greatest climate risks with the least formal protection. Embedding climate responsiveness into social protection is therefore not optional, rather, it is central to preventing deepening poverty, protecting household consumption, and ensuring continuity of urban systems. Adapting schemes to anticipate, absorb, and respond to climate shocks will be critical for building a resilient workforce and a resilient city.



Appendix



Figure 12: Four pillars of implementation for Ayushman Bharat Scheme

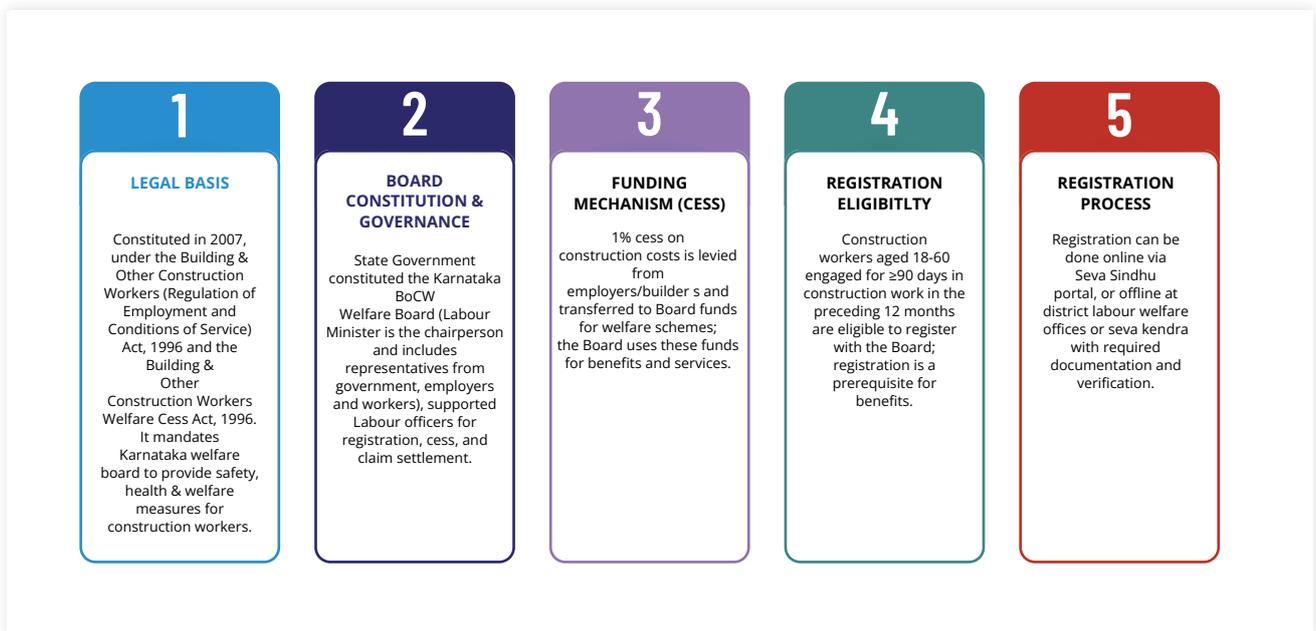


Figure 13: Existing Institutional and Registration Framework for the Karnataka BoCW Welfare Board

Table 3: Examples of document requirements for KBoCW sub-schemes

Category	Schemes	Benefits
Financial security and pension	Pension Scheme	Monthly pension of up to ₹3000 after age 60 years, applicable to workers registered for at least three consecutive years
	Disability Pension	Monthly pension of ₹1,000 and ex-gratia of up to ₹2 Lakhs, depending on the percentage of disability (due to worksite accident or illness)
	Accident death/ permanent disability pension	One time financial assistance up to ₹5 lakhs in case of work related death or permanent disability
	Funeral Assistance	₹4000 for funeral expense and ₹50,000 for ex-gratia for family/dependents
Health, welfare and maternity	Medical Assistance	Financial assistance of ₹300 per day of hospitalisation (minimum 48 hours); up to ₹10,000; applicable in government/ empanelled hospitals
	Assistance for Major Ailments	Financial assistance of up to ₹2,00,000 for treatment of critical illnesses (eg, heart ,kidney, cancer)
	Maternity assistance	Financial assistance of up to ₹30,000 for a female child and ₹20,000 for a male child
	Pre-schools education and nutritional support	Financial support of ₹6,000 per year to a child of a registered female construction worker
Education and skill development	Educational Assistance (Kalike Bhagya)	Financial assistance for the education of two children of a registered construction worker.
	Shram Samarthaya tool kit cum training program	Financial assistance of ₹20,000 is given for tool kit and related skill training
	KSRTC Bus pass for students	Assistance of free student bus pass to children of registered construction workers travelling KSRTC buses.
Education and skill development	Housing assistance	₹2,00,000 for construction or purchase of the house
	Marriage assistance	₹50,000 for the marriage of beneficiary or two dependent children
	LPG Connection	Assistance for a gas connection including a two burner stoves and a refill
	BMT Buss passes	Assistance of free bus passes to registered construction workers.

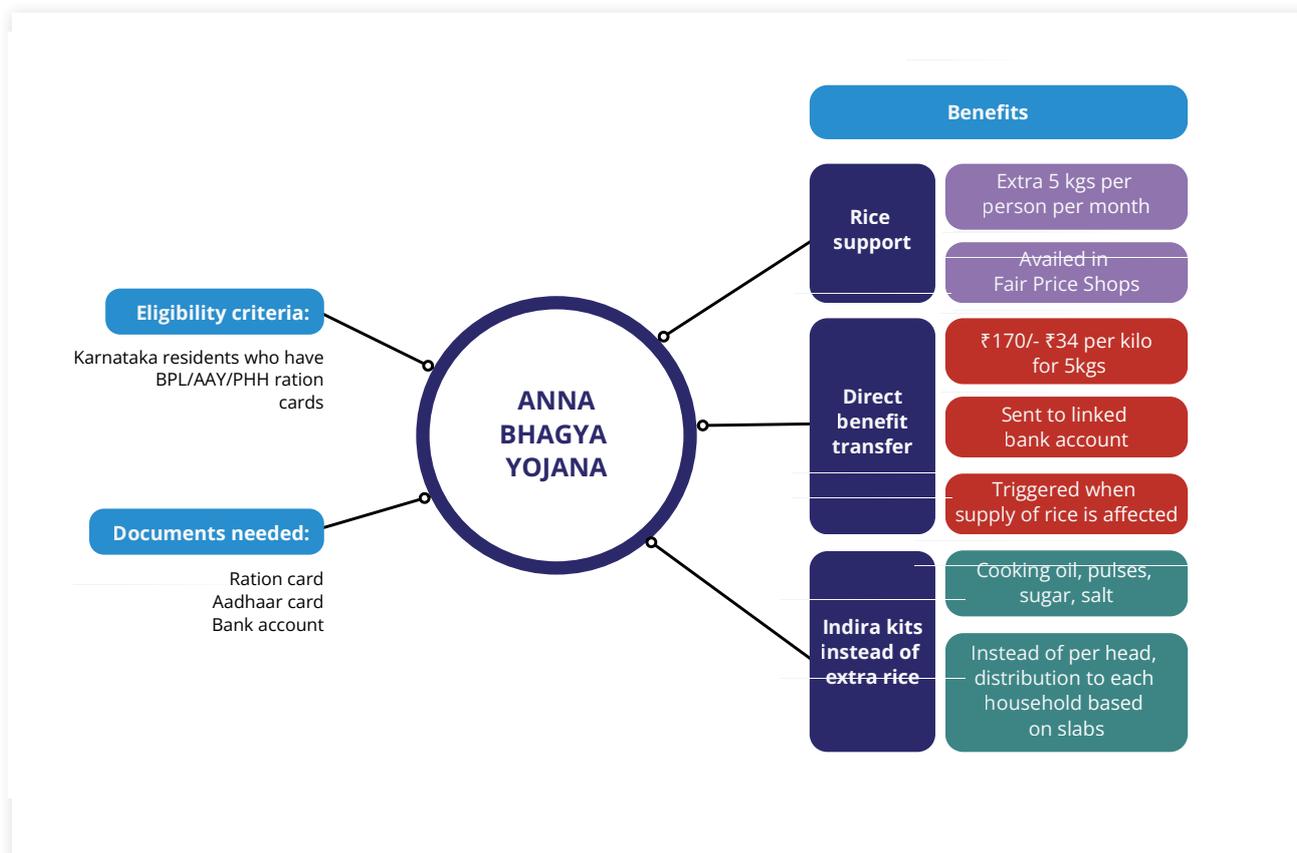


Figure 14: Anna Bhagya Yojana^{7 8}

⁷ The DBT mechanism is only triggered when there are challenges in supply of rice from the Food Corporation of India. Additionally, Indira food kit provision is a new mechanism since October 2025 to replace the rice support mechanism within Anna Bhagya Scheme.

⁸ The New Indian Express. (2025). Karnataka replaces 5kg free rice under Anna Bhagya with nutritional food kits to cut costs.

<https://www.newindianexpress.com/states/karnataka/2025/Oct/10/karnataka-replaces-5kg-free-rice-under-anna-bhagya-with-nutritional-food-kits-to-cut-costs>



End Notes

- ¹Kidwai, A., et al. (2024). Coping with Climate: How extreme weather is already impacting internal migrants. People's Courage International and ISET <https://www.peoplescourageinternational.org/pdfs/PCI%20RESEARCH%20REPORT%20FINAL.pdf>
- ²India, P. (2021). India has 43 cities in the world's 100 most vulnerable cities: Verisk Maplecroft. Prakati India. <https://prakati.in/india-has-43-cities-in-worlds-100-most-vulnerable-cities-verisk-maplecroft/>
- ³Kalyan, R. (2025, November 18). Bengaluru among world's top 10 most densely populated cities; India houses five megacities: UN report. Deccan Herald. <https://www.deccanherald.com/india/karnataka/bengaluru/bengaluru-among-worlds-top-10-most-densely-populated-cities-india-houses-five-megacities-un-report-3802567>
- ⁴Bengaluru Census Data. (n.d.). Bengaluru (Bengaluru): Population, literacy and religion (2025 projections). Census2011. Retrieved December 22, 2025, from <https://www.census2011.co.in/census/city/448-bangalore.html>
- ⁵Rao, H.S.R. (2020). Bangalore informal labour markets. Indian Institute of Management Bangalore. https://www.iimb.ac.in/turn_turn/bangalore-informal-labour-markets.php
- ⁶Geetanjali & Roy. (n.d.). Heat waves and disproportionate impact on waste workers in Bangalore. Hasiru Dala. <https://wastenarratives.wordpress.com/2024/07/23/trapped-by-heat/>
- ⁷Rathod, S. (2024, November 10). How Bengaluru's migrant workers pay with their lives for climate change and corruption. The News Minute. <https://www.thenewsminute.com/karnataka/how-bengalurus-migrant-workers-pay-with-their-lives-for-climate-change-and-corruption>
- ⁸Rahman, A., Singh, C., & Srinivas, A. (2024). Migration along Bengaluru's rural-urban continuum: Implications for household well-being and climate change adaptation. Indian Journal of Human Development, 18(1), 56-75. <https://doi.org/10.1177/09737030241244572>
- ⁹Ulrichs, M. (2016). Increasing people's resilience through social protection. Overseas Development Institute. <https://media.odi.org/documents/10555.pdf>
- ¹⁰Bharadwaj, R., Karthikeyan, N. & Chaliha, S. (2022). Social protection and informal job market reform for tackling the climate-migration nexus. International Institute for Environment and Development. <https://www.iied.org/sites/default/files/pdfs/2022-09/211211IED.pdf>
- ¹¹Bhardwaj, R. et al. (2025). Climate resilience through social protection: The economic case for early action. International Institute for Environment and Development. <https://www.iied.org/sites/default/files/pdfs/2025-10/22668iied.pdf>
- ¹²Kidwai, A., et al. (2024). Coping with Climate: How extreme weather is already impacting internal migrants. People's Courage International and ISET <https://www.peoplescourageinternational.org/pdfs/PCI%20RESEARCH%20REPORT%20FINAL.pdf>
- ¹³Mohan, C., et al. (2024). Karnataka's Climate Crisis: Urban Challenges and Sustainable Solutions for Bangalore. Journal of Emerging Technologies and Innovative Research. Volume 11, Issue 10. <https://www.jetir.org/papers/JETIR2410320.pdf>
- ¹⁴Valambhia, K. (2025). Green Spaces and Climate Resilience: British New Towns vs Indian Megacities. CREDAI-MCHI. <https://mchi.net/green-spaces-and-climate-resilience-british-new-towns-vs-indian-megacities/#:~:text=In%20Bengaluru%2C%20for%20instance%2C%20rapid.inundation%20of%20low%2Dlying%20neighborhoods.>
- ¹⁵Murali, J & Pradhan, A. (2025). Urban Heat Island in Bengaluru: Built-up Growth and Temperature Trends. E3S Web of Conferences, 648 https://www.researchgate.net/publication/395361431_Urban_Heat_Island_in_Bengaluru_Built-up_Growth_and_Temperature_Trends
- ¹⁶D'souza, P. (2024, November 17). Experts: Rains to get shorter, more intense but infra dated. Times of India. <https://timesofindia.indiatimes.com/city/bengaluru/intense-rains-expected-a-transformative-climate-challenge-for-india/articleshow/115391866.cms>
- ¹⁷Ghosh, S. (2025, August 28). India's migrant workers face climate risks with little protection. Nature <https://www.nature.com/articles/d44151-025-00159-2#:~:text=Neglecting%20mobility%20in%20policy%20design,%E2%80%9CThat%20is%20outdated.>
- ¹⁸Al Jazeera. (2022, September 7). Photos: Tractors to the rescue as floods hit India's Bengaluru. <https://www.aljazeera.com/gallery/2022/9/7/photos-tractors-to-the-rescue-as-floods-hit-indias-bengaluru>
- ¹⁹Raj, S. (2024, October 24). DK Shivakumar orders slew of flood relief measures amid heavy rain in Bengaluru. India Today. <https://www.indiatoday.in/india/karnataka/story/bengaluru-rain-deputy-chief-minister-dk-shivakumar-flood-relief-measures-heavy-rain-cyclone-dana-2622170-2024-10-24>
- ²⁰Express News Service. (2024, April 4). Karnataka issues guidelines to tackle heatwave: 'Stay indoors from noon to 3 pm, avoid dehydration, keep pets in shade'. The Indian Express. <https://indianexpress.com/article/cities/bangalore/karnataka-guidelines-heatwave-stay-indoors-from-dehydration-shade-9251636/>
- ²¹Shah, A. (2019). Households after a natural disaster [PDF]. National Institute of Public Finance and Policy. <https://www.nipfp.org.in/media/medialibrary/2020/01/30122019.pdf>
- ²²International Labour Organization. (n.d.). India Country Profile- Social Protection. Social Protection Platforms. <https://www.social-protection.org/gimi/ShowCountryProfile.action?iso=IN>
- ²³Asian Development Bank. (2025). Adaptive and Shock-Responsive Social Protection in Asia and the Pacific No. 359. <https://www.adb.org/sites/default/files/publication/1092431/adb-brief-359-adaptive-social-protection.pdf>
- ²⁴Bodewig, C & Hallegate, S. (2020). Building back better after COVID-19: How social protection can help countries prepare for the impacts of climate change. World Bank Blogs <https://blogs.worldbank.org/en/climatechange/building-back-better-after-covid-19-how-social-protection-can-help-countries-prepare>

- ²⁵World Bank Group. (n.d.). Adaptive Social Protection for Effective Disaster Risk Management. <https://documents1.worldbank.org/curated/en/555751539350285844/pdf/Adaptive-Social-Protection-for-Effective-Disaster-Risk-Management.pdf>
- ²⁶Tripathi, B. (2025, May 16). Q&A: How a small Indian state overcame parametric insurance hurdles. Context. <https://www.context.news/climate-risks/how-a-small-indian-state-overcame-parametric-insurance-hurdles>
- ²⁷Evans, S. (2024, August 24). Nagaland renews parametric insurance, with SBI General, Munich Re & GIC Re support. Artemis <https://www.artemis.bm/news/nagaland-renews-parametric-insurance-with-sbi-general-munich-re-gic-re-support/>
- ²⁸United Nations. (n.d.). Gyeonggi: Climate insurance as a safety net for all residents. Climate Action. <https://www.un.org/en/climatechange/gyeonggi-climate-insurance-safety-net-all-residents>
- ²⁹Firestone, S. & Wyndham, K. (n.d.). Quiero Mi Barrio – I Love My Neighborhood Urban Regeneration Program. AARP. <https://www.aarpinternational.org/file%20library/build%20equity/aarp-principlesinaction-quieromibarrío-casestudy-final.pdf>
- ³⁰Mahatma Gandhi National Rural Employment Guarantee Act, 2005. (n.d.). https://www.indiacode.nic.in/bitstream/123456789/6930/1/the_mahatma_gandhi_national_rural_employment_guarantee_act%2C_2005.pdf
- ³¹Maione, C. (2020). Adapting to drought and extreme climate: Hunger Safety Net Programme, Kenya. World Development Perspectives Volume 20, December 2020, 100270. <https://www.sciencedirect.com/science/article/abs/pii/S2452292920300904>
- ³²Express Web Desk. (2024, November 29). Spain introduces paid 'climate leave' for workers following deadly October floods. The Indian Express. <https://indianexpress.com/article/world/spain-paid-climate-leave-workers-floods-emergencies-9696663/>
- ³³De la Cruz, J.M.N. (2025, November 3). Typhoon Tino: DSWD on full alert, 2.5 million food packs prepositioned. Business Mirror. <https://businessmirror.com.ph/2025/11/03/typhoon-tino-dswd-on-full-alert-2-5-million-food-packs-prepositioned>
- ³⁴Ministry of Health and Family Welfare, Government of India (2017). National Health Policy, 2017. <https://mohfw.gov.in/sites/default/files/9147562941489753121.pdf>
- ³⁵Press Information Bureau, Ministry of Information and Broadcasting. (2022). Ayushman Bharat: Holistic Healthcare for India. <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2022/apr/doc202243051901.pdf>
- ³⁶Sancheti, P., et al. (2023). Road to universal health coverage: unique model of Karnataka, India. International Journal of Community Medicine and Public Health. https://www.researchgate.net/profile/Pooja-Sancheti-5/publication/370764987_Road_to_universal_health_coverage_unique_model_of_Karnataka_India/links/6461d38b4353ba3b3b679937/Road-to-universal-health-coverage-unique-model-of-Karnataka-India.pdf
- ³⁷People's Courage International. (2025). Emergency response to heat wave crisis in South and Southeast Asia: Progress Report. <https://www.peoplescourageinternational.org/pdfs/Emergency%20response%20to%20heat%20wave%20crisis%20in%20South%20and%20Southeast%20Asia.pdf>
- ³⁸Dixit, R., Chauhan, R. & Juneja, K. (2025). Awareness and Utilization of Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-NHPM) among Beneficiaries of Gautam Buddha Nagar District: A Comparative Study. <https://pmc.ncbi.nlm.nih.gov/articles/PMC11927863/>
- ³⁹Press Information Bureau, Ministry of Health and Family Welfare. (2022). Steps taken to Improve Coverage under AB-PMJAY Scheme. <https://www.pib.gov.in/PressReleaseFramePage.aspx?PRID=1843849>
- ⁴⁰Azim Premji Foundation. (n.d.). Status of health in urban settlements of Bengaluru. https://docs.google.com/presentation/d/1Mi_qlB3-uMFI6PMqTLsWwsgRbTAKWHh/edit?slide=id.p13#slide=id.p13
- ⁴¹Ministry of Health and Family Welfare, Government of India (n.d.). Ayushman Sabha https://ayushmanbhav.mohfw.gov.in/ayushman-sabha#:~:text=The%20Ayushman%20Sabha%20is%20led%20by:%20*,eligible%20PM%2DJAY%20beneficiaries%20*%20Delivering%20health%20talks
- ⁴²National Health Authority. (n.d.). Call center-Ayushman Bharat Digital Mission. Ayushman Bharat Digital Mission. <https://abdm.gov.in/call-center>
- ⁴³Department of Health and Family Welfare Services, Government of Karnataka(n.d.). Contact us. Ayushman Bharat-Arogya Karnataka. <https://arogya.karnataka.gov.in/Forms/Contact.aspx>
- ⁴⁴Ministry of Health and Family Welfare, Government of India. (2022, February 14). Integration with beneficiary database under different schemes aimed at enrichment of database for implementation of AB PM-JAY. Press Information Bureau. <https://www.pib.gov.in/PressReleaseFramePage.aspx?PRID=1798319®=3&lang=2#:~:text=NHA%20is%20working%20on%20integrating.using%20their%20ration%20card%20number.>
- ⁴⁵Comptroller and Auditor General of India. (2023). Report No. 11 of 2023- Performance Audit of Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana – Union Government (Civil) National Health Authority Ministry of Health and Family Welfare. <https://cag.gov.in/en/audit-report/details/119060>
- ⁴⁶Suvarna Arogya Suraksha Trust. (n.d.). Benefit Package of Ayushman Bharat - Arogya Karnataka Scheme for Government Hospitals. <https://sast.karnataka.gov.in/sast/arogya/pkpdf.php?psch=Ayushman%20Bharat%20-%20Arogya%20Karnataka&htype=Government&sname=Burns,Cardiothoracic%20Surgery,DENTAL%20AND%20ORAL%20AND%20MAXILLOFACIAL%20SURGERY,ENT.GENERAL%20MEDICINE.GENERAL%20SURGERY,MENTAL%20DISORDER%20PACKAGES,NEONATAL%20AND%20PAEDIATRICS,NEUROSURGERY,OBSTETRICS%20AND%20GYNAECOLOGY,ONCOLOGY,OPHTHALMOLOGY,ORTHOPAEDICS,UROLOGY,NEONATAL%20AND%20PAEDIATRICS%20SURGERIES,PLASTIC%20AND%20RECONSTRUCTIVE%20SURGERY,POLYTRAUMA,SURGICAL-%20GASTROENTEROLOGY,CARDIOLOGY,CARDIOVASCULAR%20SURGERY,INTERVENTIONAL%20NEURORADIOLOGY,Unspecific%20package,EMERGENCY%20ROOM,GENERAL%20EMERGENCY,SIMPLE%20SECONDARY%20GENERAL%20PROCEDURES,PULMONOLOGY>

⁴⁷Ibid.

⁴⁸Lakshmana, C.M. (2021). Utilisation and the Opinion on Public Healthcare Delivery in Karnataka. Policy brief. https://www.isec.ac.in/wp-content/uploads/2023/07/PB-41-Utilisation-and-the-Opinion-on-Public-Healthcare-Delivery-in-Karnataka_Final.pdf

⁴⁹Nihira. (2021, November 10). Problems of supply and quality make Bengalureans wary of buying medicines from Jan Aushadi Kendras. Citizen Matters. <https://citizenmatters.in/generic-medicine-stores-jan-aushadi-kendras-quality-problems-shortage/>

⁵⁰Comptroller and Auditor General of India. (2023). Report No. 11 of 2023- Performance Audit of Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana – Union Government (Civil) National Health Authority Ministry of Health and Family Welfare. <https://cag.gov.in/en/audit-report/details/119060>

⁵¹National Health Authority. Ayushman Bharat Pradhan Mantri Jan Arogya Yojana. <https://dashboard.nha.gov.in/public/>

⁵²Rajya Sabha, Parliament of India. (2023). One Hundred and Fifty First report on Implementation of Ayushman Bharat. https://sansad.in/getFile/rsnew/Committee_site/Committee_File/ReportFile/14/187/151_2023_12_19.pdf?source=rajyasabha

⁵³Ministry of Health and Family Welfare. (2024). Update on Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY). Press Information Bureau. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2086513®=3&lang=2>

⁵⁴OECD (2025), Health at a Glance 2025: OECD Indicators, OECD Publishing, Paris. <https://doi.org/10.1787/8f9e3f98-en>.

⁵⁵National Health Authority. (n.d.). NHA public dashboard [Dashboard]. Government of India. <https://dashboard.nha.gov.in/public/>

⁵⁶Mor, N. & Bajaj, S. (2023, December 07). Take PMJAY to the next level. Deccan Herald. <https://www.deccanherald.com/opinion/take-pmjay-to-the-next-level-2800227>

⁵⁷Sphere India. (2021). Uttarakhand Disaster Joint Needs Assessment Report. <http://www.sphereindia.org.in/sites/default/files/2021-07/JRNA%20UK%2023321.pdf>

⁵⁸Medical Buyer. (2025). Healthcare Industry Flags Payment Delays, no Reimbursement under AB-PMJAY. <https://medicalbuyer.co.in/healthcare-industry-flags-payment-delays-no-reimbursements-under-ab-pmjay/>

⁵⁹Jha, D.N. (2025, June 02). Ayushman enrolments see dip as private hospitals back off over rates, delays. Times of India. <https://timesofindia.indiatimes.com/india/ayushman-enrolments-see-dip-as-private-hospitals-back-off-over-rates-delays/articleshow/121556256.cms>

⁶⁰Government of India, Ministry of Health and Family Welfare. (2019, December 6). Lok Sabha unstarred question no. 3177: Hospitals denying treatment under Ayushman Bharat Yojana [Parliamentary question and reply]. Lok Sabha. <https://sansad.in/getFile/loksabhaquestions/annex/172/AU3177.pdf?source=pqals>

⁶¹Comptroller and Auditor General of India. (2023). Report No. 11 of 2023- Performance Audit of Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana – Union Government (Civil) National Health Authority Ministry of Health and Family Welfare. <https://cag.gov.in/en/audit-report/details/119060>

⁶²Grewal, H., et al. (2023). Universal Health Care System in India: An InDepth Examination of the Ayushman Bharat Initiative. Cureus. <https://assets.cureus.com/uploads/editorial/pdf/162060/20230721-11127-1nhad5d.pdf>

⁶³Press Information Bureau. (2025, November 1). Towards universal healthcare: Ayushman Bharat Pradhan Mantri-Jan Arogya Yojana (AB-PMJAY). Government of India [https://www.pib.gov.in/PressReleasePage.aspx?PRID=2185049®=3&lang=2#:~:text=Since%20its%20launch%2C%20AB%2DPMJAY,India%20\(2024%2D25\)](https://www.pib.gov.in/PressReleasePage.aspx?PRID=2185049®=3&lang=2#:~:text=Since%20its%20launch%2C%20AB%2DPMJAY,India%20(2024%2D25))

⁶⁴Ministry of Health and Family Welfare. (2025). Rajya Sabha Unstarred Question No. 290 to be answered on 4th February 2025: Treatment Under ABPMJAY. https://sansad.in/getFile/annex/267/AU290_lyz6jU.pdf?source=pqars&utm

⁶⁵Rajya Sabha, Parliament of India. (2023). One Hundred and Fifty First report on Implementation of Ayushman Bharat. https://sansad.in/getFile/rsnew/Committee_site/Committee_File/ReportFile/14/187/151_2023_12_19.pdf?source=rajyasabha

⁶⁶Comptroller and Auditor General of India. (2023). Report No. 11 of 2023- Performance Audit of Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana – Union Government (Civil) National Health Authority Ministry of Health and Family Welfare. <https://cag.gov.in/en/audit-report/details/119060>

⁶⁷PRS Legislative Research. (n.d.). Demand for Grants 2024-25 Analysis Health and Family Welfare. <https://prsindia.org/budgets/parliament/demand-for-grants-2024-25-analysis-health-and-family-welfare>

⁶⁸Deccan Herald. (2025). Primary Health Centres Shed 'always sick' tag, turn reliable for the neglected in Bengaluru. <https://www.deccanherald.com/india/karnataka/bengaluru/primary-health-centres-shed-always-sick-tag-turn-reliable-for-the-neglected-in-bengaluru-3761272>

⁶⁹Busse, R., Blumel, M., Kneips, F. & Bärnighausen, T. (2017). Statutory health insurance in Germany: a health system shaped by 135 years of solidarity, self-governance, and competition. The Lancet. Volume 390, Issue 10097, 882 – 897. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)31280-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)31280-1/fulltext)

⁷⁰Karnataka State Disaster Management Authority Revenue Department (Disaster Management), Government of Karnataka. (N.D.). Karnataka State Heat Wave Action Plan 2024-25. <https://heathealth.info/wp-content/uploads/Karnataka-heat-action-plan-.pdf>

⁷¹Parliament of India. (1996). The Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act, 1996. In THE BUILDING AND OTHER CONSTRUCTION WORKERS' (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996. <https://maitri.mahaonline.gov.in/pdf/building-and-other-construction-workers-act-1996.pdf>

⁷²Labour Department, Government of Karnataka. (n.d.). Karnataka Building and Other Construction Workers' Welfare Board Benefits. Government of Karnataka. <https://labour.karnataka.gov.in/35/karnataka-building-and-other-construction-workers%E2%80%99-welfare-board-benefits/en>

- ⁷³Manasi, S., Tantri, M. L., & Kambara, C. (2021). Migrant construction workers and question of inclusiveness: A case study of Bengaluru City (Policy Brief No. 45). Institute for Social and Economic Change. <https://www.isec.ac.in/wp-content/uploads/2023/07/PB-45-Migrant-Construction-Workers-and-Question-of-Inclusiveness-Final.pdf>
- ⁷⁴Latha, N. (n.d.). Education of migrant construction workers in Bangalore: Issues and concerns. Centre for Educational and Social Studies <https://cessedu.org/blog/education-migrant-construction-workers-bangalore-issues-and-concerns#:~:text=In%20addition%2C%20majority%20of%20them,making%20and%20its%20effective%20implementation.>
- ⁷⁵Prabhu, N. (2017, July 29). Large corpus of funds for workers' welfare lies unused in State. The Hindu. <https://www.thehindu.com/news/national/karnataka/large-corpus-of-funds-for-workers-welfare-lies-unused-in-state/article19387738.ece#:~:text=Only%202.4%25%20of%20%E2%82%B94%2C782.KBOCW%20and%20conducted%20by%20M.R.>
- ⁷⁶Padmavinod, H. (2025, October 24). Where's the welfare? Bengaluru construction workers left in the lurch, demand answers. Citizen Matters. <https://citizenmatters.in/karnataka-welfare-board-benefits-bengaluru-construction-workers-demands/>
- ⁷⁷Biswas, S. (2021, July 27). Improving access to Building and Other Construction Workers cards. India Development Review. <https://idronline.org/article/rights/improving-acces-tobuilding-and-other-construction-workers-bocw-cards/>
- ⁷⁸Ibid
- ⁷⁹Padmavinod, H. (2025, October 24). Where's the welfare? Bengaluru construction workers left in the lurch, demand answers. Citizen Matters. <https://citizenmatters.in/karnataka-welfare-board-benefits-bengaluru-construction-workers-demands/>
- ⁸⁰Ibid
- ⁸¹Konar, A. & Trivedi, E. (n.d.). The Building and Other Construction Workers (BOCW) Scheme: Welfare measures and challenges on ground. Policy and development Advisory Group. [https://pdag.in/blogs/the-building-and-other-construction-workers-bocw-scheme-welfare-measures-and-challenges-on-ground/#:~:text=The%20Building%20and%20Other%20Construction%20Workers%20\(BOCW\)%20scheme%20was%20not,destination%20states%20for%20better%20implementation.](https://pdag.in/blogs/the-building-and-other-construction-workers-bocw-scheme-welfare-measures-and-challenges-on-ground/#:~:text=The%20Building%20and%20Other%20Construction%20Workers%20(BOCW)%20scheme%20was%20not,destination%20states%20for%20better%20implementation.)
- ⁸²Prasad, N. (n.d.). Study on working class: Building and Other Construction Workers. Scribd. <https://www.scribd.com/document/71577455/Study-on-working-class-Building-and-Other-Construction-Workers#:~:text=Only%2010%25%20of%20survey%20participants,Scheme%20planned%20by%20Karnataka%20Board.>
- ⁸³Lions, B. (2021). Study of Welfare Impact of Usage of Construction Workers Welfare Board Cess in Karnataka. Karnataka Evaluation Authority, Government of Karnataka. https://kmea.karnataka.gov.in/storage/pdf-files/Reports%20and%20other%20docs/PAC_KEA_CWWB%20Study_Final_Report_Submitted_EN.pdf
- ⁸⁴Karnataka Building And Other Construction Workers Welfare Board. (n.d.). Schemes. Government of Karnataka. <https://karbwwb.karnataka.gov.in/42/schemes/en#:~:text=of%20pension%20etc%20%2D-1..Identity%20Card%20with%20the%20application.>
- ⁸⁵Ibid
- ⁸⁶Biswas, S. (2021, July 27). Improving access to Building and Other Construction Workers cards. India Development Review. <https://idronline.org/article/rights/improving-acces-tobuilding-and-other-construction-workers-bocw-cards/>
- ⁸⁷Government of India, Ministry of Labor & Employment. (n.d.). Model Welfare Scheme for building and other construction workers and Action Plan for Strengthening Implementation machinery. Government of India. https://labour.gov.in/sites/default/files/model_welfare_schemefinal.pdf
- ⁸⁸Online Bureau. (2024, August 22). Labour ministry launches Building & Other Construction Workers Management Information System portal. ET Government. <https://government.economicstimes.indiatimes.com/news/governance/labour-ministry-launches-building-other-construction-workers-management-information-system-portal/112703498?>
- ⁸⁹Ibid
- ⁹⁰Ibid
- ⁹¹Sujay, B. M. (2024, September 29). Bogus labour cards swell to 1.5 L, Karnataka govt plans crackdown. Deccan Herald. <https://www.deccanherald.com/india/karnataka/bogus-labour-cards-swell-to-15l-karnataka-govt-plans-crackdown-3211474>
- ⁹²Bansal, K. (2025). Reflection over unspent Special-Purpose Funds in India: A Case of Building and other Construction Workers (BOCW) Welfare Fund. International Journal of Research in Social Science and Humanities, 6(5), 13–21. <https://doi.org/10.47505/ijrss.2025.5.2>
- ⁹³Government of India, Ministry of Labour and Employment. (2020, September 28). The Code on Social Security, 2020 (Act No. 36 of 2020) [Act]. The Gazette of India. <https://www.indiacode.nic.in/bitstream/123456789/16823/1/aA2020-36.pdf>
- ⁹⁴Government of India, Ministry of Law & Justice. (2020, September 28). The Occupational Safety, Health and Working Conditions Code, 2020 (Act No. 37 of 2020) [Act]. The Gazette of India. <https://dginasli.gov.in/public/Admin/Cms/AIIPdf/650059fbb8f1a9.98699174.pdf>
- ⁹⁵Department of Food and Public Distribution, Government of India. (n.d.). Public Distribution System. National Food Security Portal. https://nfsa.gov.in/portal/PDS_page
- ⁹⁶Department of Food and Public Distribution, Government of India. (n.d.). National Food Security Act, (NFSA) 2013. National Food Security Portal. <https://nfsa.gov.in/portal/nfsa-act>
- ⁹⁷Food, Civil Supplies and Consumer Department, Government of Karnataka. (n.d.) Anna Bhagya Scheme. National Information Centre. <https://ahara.karnataka.gov.in/Home/AnnaBhagyaYojana>
- ⁹⁸Purohit, D. (2025). Impact evaluation for Government of Karnataka's 5 guarantees [Report]. Indus Action https://indusaction.org/#_publication

- ⁹⁹Dalberg. (2022). Fulfilling the promise of One Nation One Ration Card: A frontline perspective from 5 Indian states. <https://dalberg.com/wp-content/uploads/2022/04/Report-Fulfilling-the-promise-of-One-Nation-One-Ration-Card-A-frontline-perspective-from-5-Indian-states.pdf>
- ¹⁰⁰Purohit, D. (2025). Impact evaluation for Government of Karnataka's 5 guarantees [Report]. Indus Action. <https://indusaction.org/#publication>
- ¹⁰¹Pasha, A.S. (2025). Evaluation of Functioning of 'anna Bhagya' Scheme and its Impacts on Food security and achieving the SDG Goal 2 of Zero Hunger in Karnataka State. Karnataka Monitoring and Evaluation Authority, Government of Karnataka. https://kmea.karnataka.gov.in/uploads/media_to_upload1759554785.pdf
- ¹⁰²Shamala, B. & Prasad, R.T. (2019). The Socio Economic Status of Unorganised Migrant Construction Labourers in Karnataka: A Case Study in Bangalore. Shanlax International Journal of Economics, vol. 7, no. 2, 2019, pp. 62-67. <https://pdfs.semanticscholar.org/632e/3d5b52d75916bb9bae8710c525f67a5b8ac7.pdf>
- ¹⁰³Shah, N. & Srinivas, A. (2025, December 9). One Nation, Fragmented Rations: migration and food (in)security in Bengaluru. The Migration Story <https://www.themigrationstory.com/post/one-nation-fragmented-rations-migration-and-food-in-security-in-bengaluru>
- ¹⁰⁴Mulla, J. A. (2023, July 23). Over 94k people miss Anna Bhagya cash due to lack of docus, accounts, glitches. Times of India. <https://timesofindia.indiatimes.com/city/hubballi/over-94k-people-miss-anna-bhagya-cash-due-to-lack-of-docus-accounts-glitches/articleshow/102409197.cms>
- ¹⁰⁵Bhanu, S. (2023, August 23). Shortfall in cash transfers: Anna Bhagya fails to reach all beneficiaries. Citizen Matters <https://citizenmatters.in/anna-bhagya-cash-transfers-congress-government-rice-ragi-domestic-workers-ahaar-website-aadhar-bank-account/>
- ¹⁰⁶Channal, G.P., et al. (2020). Problems faced by Anna Bhagya beneficiaries and the suggestion given by them for improvement of Anna Bhagya scheme. Agriculture Update 15(1-2), 62-67. [https://researchjournal.co.in/online/AU/AU-15\(1and2\)/15_62-67_A.pdf](https://researchjournal.co.in/online/AU/AU-15(1and2)/15_62-67_A.pdf)
- ¹⁰⁷Sridharan, B. (2023, August 22). Missing: 'Anna' in Anna Bhagya scheme. Citizen Matters. <https://citizenmatters.in/anna-bhagya-scheme-congress-gruha-lakshmi-rice-ragi-bpl-ration-shops-domestic/>
- ¹⁰⁸Rajendraprasad, N. L. (2018). Anna Bhagya scheme: A sociological study (with special reference to Ballari District). EPRA International Journal of Economic and Business Review, 6(12). <https://eprajournals.com/IJES/article/7887/abstract>
- ¹⁰⁹Purohit, D. (2025). Impact evaluation for Government of Karnataka's 5 guarantees [Report]. Indus Action. https://indusaction.org/#_publication
- ¹¹⁰Ramakrishnan, T. (2023, July 5). Lessons from the fracas over foodgrains. The Hindu. <https://www.thehindu.com/opinion/op-ed/lessons-from-the-fracas-over-foodgrains/article67041326.ece>
- ¹¹¹Adda 247. (2023, June 21). Karnataka's Anna Bhagya Scheme. <https://currentaffairs.adda247.com/karnatakas-anna-bhagya-scheme/>
- ¹¹²Saini, S., et al. (2024). Unconditional Cash Transfers for Rice in Karnataka: A Study of Beneficiary Responses and Challenges Under the Anna Bhagya Scheme - Preliminary Findings. Arcus Policy Research. https://arcusresearch.in/wp-content/uploads/2024/01/DBT_Karnataka.pdf
- ¹¹³Ibid
- ¹¹⁴Mulla, J. A. (2023). Over 94k people miss Anna Bhagya cash due to lack of docus, accounts, glitches. Times of India. <https://timesofindia.indiatimes.com/city/hubballi/over-94k-people-miss-anna-bhagya-cash-due-to-lack-of-docus-accounts-glitches/articleshow/102409197.cms>
- ¹¹⁵The News Minute. (2018). Free rice for Kerala flood victims to be supplied till December, announces CM. The News Minute <https://www.thenewsminute.com/kerala/free-rice-kerala-flood-victims-be-supplied-till-december-announces-cm-90391>
- ¹¹⁶Gruha Jyothi Scheme, 2024: How to avail free electricity for your home. (n.d.). Legalkart. <https://www.legalkart.com/legal-blog/gruha-jyothi-scheme-2024-how-to-avail-free-electricity-for-your-home?>
- ¹¹⁷Umakanth, S., et al. (2024). Impact of Gruha Jyothi Scheme on BPL families and measuring the effectiveness of Gruha Jyothi Scheme beneficiaries (with particular reference to BPL families who are residing in Bengaluru City). International Journal of All Research Education & Scientific Methods, 12(3). <https://www.ijaresm.com/impact-of-gruha-jyothi-scheme-on-bpl-families-and-measuring-the-effectiveness-of-gruha-jyothi-scheme-beneficiaries-with-particular-reference-to-bpl-families-who-are-residing-in-bengaluru-city>
- ¹¹⁸Ibid
- ¹¹⁹BESCOM. (2023, June 16). Gruha Jyothi scheme FAQ (English). Bangalore Electricity Supply Company Limited. https://bescom.karnataka.gov.in/storage/pdf-files/aetomd/FAQ_ENGLISH_16-06-2023_GJ.pdf
- ¹²⁰Paul, J. (2023, August 7). Serendipitous sustainability: How Karnataka's 'Gruha Jyothi' and 'Shakti' schemes can bolster climate action. Oxford Human Rights Hub. <https://ohrh.law.ox.ac.uk/serendipitous-sustainability-how-karnatakas-gruha-jyothi-and-shakti-schemes-can-bolster-climate-action/#:~:text=The%20scheme%20aims%20to%20alleviate%20the%20financial,specific%20consumption%20limits%20to%20avail%20the%20benefits.>
- ¹²¹Purohit, D. (2025). Impact evaluation for Government of Karnataka's 5 guarantees [Report]. Indus Action https://indusaction.org/#_publication
- ¹²²Sridharan, B. (2023, July 10). From glitchy portals to printing shops: Bengalureans resort to all means to access Gruha Jyothi. Citizen Matters. <https://citizenmatters.in/free-electricity-gruha-jyothi-seva-sindhu-portal-registration-middlemen-poor/>
- ¹²³Ibid
- ¹²⁴Government of Karnataka. (N.D.). Gruha Jyothi - Frequently Asked Questions. <https://ceg.karnataka.gov.in/assets/front/pdf/FAQ%20for%20%20Gruha%20Jyothi.pdf>

- ¹²⁵Kaggere, N. (2024, January 18). Shifting your house? Brace for Gruha Jyothi re-registration woes. The Times of India. <https://timesofindia.indiatimes.com/city/bengaluru/shifting-your-house-brace-for-gruha-jyothi-re-registration-woes/articleshow/106941560.cms?>
- ¹²⁶Government of Karnataka. (n.d.). Development of Bengaluru Metropolitan Region, Chapter 17. Karnataka Economic Survey, 2021-22. <https://planning.karnataka.gov.in/storage/pdf-files/Economic%20Survey/Chapter%20Eng%2017.pdf>
- ¹²⁷Government of Karnataka. (2025). Budget 2025-26. https://finance.karnataka.gov.in/uploads/media_to_upload1741332694.pdf
- ¹²⁸The Hindu Bureau. (2023, June 7). Gruha Lakshmi scheme in Karnataka: Who is eligible. The Hindu. <https://www.thehindu.com/news/national/karnataka/families-paying-income-tax-or-filing-gst-out-of-the-ambit-of-gruha-lakshmi/article66939440.ece>
- ¹²⁹Government of Karnataka. (2025). Budget 2025-26. https://finance.karnataka.gov.in/uploads/media_to_upload1741332694.pdf
- ¹³⁰Nandakumar, P. (2023, August 30). Rahul, Kharge launch Karnataka govt's 'Gruha Lakshmi' scheme. The Week. <https://www.theweek.in/news/india/2023/08/30/rahul-kharge-launch-karnataka-govts-gruha-lakshmi-scheme.html>
- ¹³¹Indus Action. (n.d.). Citizen Experience of Welfare Access: A report on the Gruha Lakshmi scheme for the Karnataka Government. <https://indusaction.org/wp-content/uploads/2025/08/Citizen-Experience-Of-Welfare-Access.pdf>
- ¹³²Kumar, A. & Hegadal, R.V. (2025). Impact of Gruha Laxmi Scheme on Women Empowerment: An empirical investigation in Raichur district of Karnataka state. Journal of Emerging Technologies and Innovative Research, 12(8). <https://www.jetir.org/papers/JETIR2508241.pdf>
- ¹³³Namrata, S. (2023, June 5). Poor women in Karnataka may miss out on Gruha Lakshmi scheme: Experts. The New Indian Express. <https://www.newindianexpress.com/karnataka/2023/Jun/05/poor-women-in-karnataka-may-miss-out-on-gruha-lakshmi-schemeexperts-2581867.html>
- ¹³⁴Express News Service. (2023, October 11). Over 9.44 lakh yet to get money under Karnataka's Gruha Lakshmi scheme. The New Indian Express. <https://www.newindianexpress.com/states/karnataka/2023/Oct/11/over-944-lakhyet-to-get-money-under-karnatakas-gruha-lakshmi-scheme-2622776.html>
- ¹³⁵Geethashree. (2025). Changing Dynamics of Household Savings: A Study on Women Empowerment through Gruhalakshmi Scheme. The Academic: International Journal of Multidisciplinary Research. <https://theacademic.in/wp-content/uploads/2025/10/10-2.pdf>
- ¹³⁶Indus Action. (n.d.). Citizen Experience of Welfare Access: A report on the Gruha Lakshmi scheme for the Karnataka Government. <https://indusaction.org/wp-content/uploads/2025/08/Citizen-Experience-Of-Welfare-Access.pdf>
- ¹³⁷United Nations Development Programme. (2024, October). Thematic Table 1: Adaptive social protection systems for vulnerable populations [Technical note]. UNDP. https://www.undp.org/sites/g/files/zskgke326/files/2024-10/technical-note-thematic-table-1-adaptive-social-protection_en.pdf

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