A Study on the Impact of Droughts catalysed by Climate Change on the Dalits and the Adivasis of Marathwada region of Maharashtra
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National Dalit Watch (NDW) was formed in 2009 to catalyse and focus efforts on monitoring rampant discrimination and exclusion perpetuated on the Dalit and the Adivasi communities during disaster relief programmes.

A series of inclusion assessments and surveys in disasters highlighted the degree to which, by virtue of their caste-induced socio-economic vulnerability, Dalits could neither anticipate, cope and recuperate from the impact of disasters nor access state relief adequately. The need for setting up such an entity was observed by the National Campaign for Dalit Human Rights (NCDHR) during its course of work, especially during the 2004 Tsunami and the 2007 Bihar floods. NCDHR, is a coalition of Dalit and Adivasi human rights activists and academics, founded in 1998, with the vision to promoting social equity and inclusion for historically marginalised communities, particularly the Dalits and Adivasis.

A common conception prevails in society at large that disasters unite people and motivate a cohesive resilience. However, evidence proves this to be a strong misconception. The studies of National Dalit Watch (NDW), since its inception, have consistently and emphatically brought to attention the deep-rooted menace of caste which manifests unfailingly in times of disaster, even when Dalit and Adivasis face greater risks and disproportionate brunt of disasters. The NDW engages with the government to adopt and fortify legal measures to address these inequalities and ensure faster relief and recovery among the Dalits, Adivasis and other similarly marginalised communities. Over the years, the NDW has persisted in calibrating and strengthening the methodologies of inclusion monitoring by involving the Dalit and Adivasi community leaders to unearth precise, responsive and actionable findings. It has attempted to effectively capture the limits and standards of inclusion of Dalits and other marginalised communities in disaster response. It has gone beyond mere reportage of incidents of discrimination and exclusion and helped survivors make appeals for relief, recovery, and disaster preparedness measures thereby resulting in the realisation of social protection and relief entitlements worth millions.

Equipped with grassroots experiences and people’s actions and research and policy analyses, NDW works to activate and strengthen the governance accountability and public services by facilitating community participation in political decision-making at local, intermediate and higher levels. Through these endeavours, the NDW has contributed towards building consciousness around caste-induced pre-existing vulnerabilities of Dalits in disasters. The NDW’s work with humanitarian agencies over the years saw the culmination in the adoption of special focus on Dalits in the National Disaster Management Plan (2019) and the Sphere India’s Multi-Sectoral Coordination Manual on Protection (2021) among other accomplished milestones.
The climate is changing, and it is changing for worse. It is no surprise why the world leaders are becoming concerned and committing to bold actions to contain the rising global temperatures within the pre-industrial limits of 1.5°C. The frequency of natural disasters has increased over the years, and the exposure to climate change induced risks and consequences have become manifold. As per the Joint Council for the Welfare of Immigrants, the richest 1% of the world’s population cause twice as much carbon dioxide as the poorest 50%. That same poorest 50%—3.5 billion people—live overwhelmingly in countries most vulnerable to climate change, meaning that they are bearing the brunt of a crisis they did not cause.

Climate change “threatens to undo the last 50 years” of development, global health and poverty reduction, stated a United Nations expert citing the risk of a new era of “climate apartheid” where the rich buy their way out of rising heat and hunger. The UN not only warned of climate apartheid but also underscored that climate change will have the greatest impact on the most vulnerable, which could potentially push more than 120 million more people into poverty by 2030. The IPCC’s ongoing Assessment Report 6 (AR6) has warned of widespread, pervasive impacts to ecosystems, people, settlements, and infrastructure due to observed increases in the frequency and intensity of climate and weather extremes, including hot extremes on land and in the ocean, heavy precipitation events, drought and fire weather.

South Asia region encompasses a global hotspot of high human vulnerability owing to poverty, governance challenges and limited access to basic services and resources, violent conflict and high levels of climate-sensitive livelihoods (e.g., smallholder, farmers, pastoralists, fishing communities), notes the IPCC AR6. The IPCC has also alerted India of continuing extreme heat waves, droughts and erratic rainfall in the coming decades. India, owing to its geo-climate positioning is susceptible to multiple hazards further exacerbated by climate change. Droughts, as one of the fallout is becoming strong across different parts of the country. According to a CEEW analysis, districts most prone to droughts include Rajkot (Gujarat), Anantapur (Andhra Pradesh), Aurangabad (Maharashtra), Barmer (Rajasthan), Churu (Rajasthan), Jaisalmer (Rajasthan) and Jodhpur (Rajasthan).

Concerned with the projections and the warning for the region and India, in particular, the National Dalit Watch of NCDHR, undertook a study to understand the impacts of drought and the priorities of the Dalit and Adivasi communities for adaptation and drought response. In this effort, I would like to acknowledge the contributions, guidance, inputs and facilitation from the advisory group members, Dr. Sampat Kale, Dr. Mohammed Irshad and Prof. Mahesh Kamble from the Tata Institute of Social Sciences (TISS), Tuljapur and Mumbai, Maharashtra.
There is no denying that climate change has accelerated water scarcity, loss of food production, displacement and involuntary migration and struggle for limited resources for everyone, but those with weak to no adaptive capacity and resources continue to face greater threats to dignity and survival. Climate apartheid is likely to impact these groups more than others.

The present study in Kallam and Osmanabad blocks in Marathwada region of Maharashtra has revealed an inescapable intersection of the causes and consequences of caste and ethnicity (descent) induced pre-existing vulnerabilities in droughts. The study foregrounds the vulnerabilities and needs of Dalits and Adivasis, who are trapped in the age-old, sub-standard and exploitative living conditions, societal and systemic neglect, and languishing in a state of resource-lessness and lack of recognition. The study has highlighted the struggle of these communities for the bare minimum and systemic inadequacies and disregard in involving their participation in disaster/drought risk management to the extent that they now find it pointless to even engage with local governance institutions.

Through this study, our aim is to inform the State, community leaders, non-profits, environment, climate and DRR networks and experts; corporate social responsibility; disaster management professionals, wider civil society, the UN and EU agencies and other concerned actors to be cognisant of the human impact to droughts when planning, designing, implementing, assessing damages and losses, monitoring and adapting their DRR and climate resilience programmes. We, at NDW-NCDHR believe that DRR and climate resilience must place human rights and social justice at the centre of all decision making, and those with the least of resources and capacity merit greater assistance to become resilient in the face of challenging climate landscape. In this regard, we impress upon the State’s disaster management and climate change authorities to dialogue with the communities to encapsulate their needs and aspirations into the state’s action plans.

I am hopeful that this beginning will go a long way in securing inclusive drought and climate change adaptation frameworks, plans and programmes to end marginalisation, avert climate apartheid like situation, and raise resilient communities.

**BEENA J. PALLICAL**
General Secretary
Dalit Arthik Adhikar Andolan & NDW-NCDHR
Climate change is not only changing the planet physically but also transforming human societies. As witnessed till date, these are not good changes. Extreme weather conditions are causing a greater frequency of natural hazards, impacting livelihoods and poverty levels. This is mounting pressure on grassroots level socio-cultural structures. Vulnerable groups are finding themselves in more compromised situations with fewer coping mechanisms. Climate change, undoubtedly, is accelerating marginalization of the already underprivileged sections. The ongoing Intergovernmental Panel on Climate Change (IPCC), Working Group II Report has warned of projected impacts and risks in the near term (2021-2040) and long-term (2041-2100) causing water and food shortages. It also approximates that over the next couple of decades the global temperature may rise by 1.5°C. This will cause extreme changes in precipitation ushering flooding and droughts in many regions. These changes will accentuate the impact on low and middle-income social groups and countries. The South Asian region has a high level of vulnerabilities. India, especially, is in a precarious position; it has a multi-hazard profile due to its unique geo-climatic and socio-economic conditions.

**CONTEXT**

India is clearly experiencing an increased frequency of weather-related natural disasters especially droughts, floods, cyclones, earthquakes, landslides, avalanches and forest fires. Marathwada, situated on the eastern border of Maharashtra state with its unique geographical state with its unique geographical conditions, is one of the most drought-prone regions of the country. The National Dalit Watch (NDW), that has been mapping caste-based exclusion in disaster situations since 2009, set out to understand the condition of Dalit and Adivasi communities, coping mechanisms and the drought mitigation measures in the region where droughts are a recurrent phenomenon.

**METHODOLOGY**

The study employed a mixed methods approach combining sample-based household survey with focus groups of SC/ST population. Eight focus groups were conducted with women, children, differently-abled, senior citizens, labourers, marginal farmers, migrant labourers and a mixed group.

**RESPONDENT PROFILE**

2207 Dalit or SC (Mahar, Matang and Chambhar) and Adivasi or ST (mostly Pardhis and a few Koli-Mahadev) participants from ten villages of Osmanabad and Kallam blocks were surveyed. The survey respondents included 59% males and 41% females, and 44% (971) SCs and 56% (1236) STs. 84% of the
respondents were engaged in agriculture and allied activities.

**FINDINGS**

1. Descent or social origin-based (caste/ethnicity) discrimination, particularly untouchability, is experienced by Dalits (or Scheduled Caste) and Adivasi (or Scheduled Tribe) people. ST respondents who faced discrimination had been called as ‘thieves’ (17%). 15% confessed a fear of facing caste-based violence or have faced it in the past. This discrimination extends to drought relief distribution either through a delay (11%) or a reduction in amount of relief materials (21%).

2. The economic vulnerability is very high—accommodation in kuccha houses (96%), non-ownership of homestead land (58%) and monthly household income below Rs. 5000 (75%).

3. Overall 68% respondents; 81% ST and 55% SC, did not attend Gram Sabhas due to lack of information (38%), lack of time (35%) and exclusionary processes (19%). Half of the respondents reported a high level of indebtedness, hopelessness and sense of loss and drought-related conflicts in community.

4. 21% of the women experienced an increase in violence during drought.

5. There was a high incidence of illnesses and malnutrition caused by drought.

6. People coped with drought by migrating (76%), selling livestock and compromising on food choices (75%).

7. Nearly all respondents (93%) denied having benefitted from the Government’s drought mitigation measures, and were neither enrolled in MGNREGS (80%) nor in any health scheme (89%).

8. While public water bodies are the most important water source (63%), most people (72%) did not have adequate water for drinking and maintaining hygiene.

**IMPLICATIONS**

1. Caste-based discrimination stretches across time (historically to the present), space (source villages to migration destination) and societal echelons (community-level to various officials).

2. The intersectional categories of women, senior citizens, differently-abled, migrants and children face unique and more severe drought impact.

3. 47% of the respondents had witnessed a high to very high level of impact on conflicts in the villages caused by drought. 41% said drought had medium impact on water-related conflicts.

4. The respondents live on a frugal average income of Rs. 40 per person per day. A majority of them do not own their homestead land and have no access to utilities such as water supply and electricity connection.

5. Drought reduces the feasibility of agriculture impacting the livelihoods of the majority of the respondents. The Dalit and the Adivasi communities are, thus, caught in a vicious cycle of economic vulnerability exacerbated by climate change that leads to further intensification of poverty level.

6. The coping response to drought was shrinkage—compromise on various needs such as food, schooling and hygiene. Migration and debt are other distress-triggered mechanisms.

7. The state needs to take special measures to mitigate drought and tackle its impacts on marginalised communities by documenting and recognising their special venerabilities, inclusion in disaster/drought risk management, governance,
preparedness, drought relief assistance and social protection coverage. Information dissemination is one of its biggest weaknesses that causes most people to be deprived of intervention measures.

8. Public infrastructure such as PDS, ICDS, Mid-day Meals and health services are weak, thereby, worsening pre-existing vulnerabilities and hampering coping mechanisms.

9. The School Management Committees (SMC) should be empowered to monitor dropout during drought and other calamities in the region and take proactive steps to support the children in need together with PRI leaders and school administration.

10. The vicious poverty cycle is further catalysed by the vulnerability of political exclusion. A majority of the respondents could not attend Gram Sabhas. This further isolates them and stagnates their living conditions.

RECOMMENDATIONS

1. Dalits and Adivasis should be empowered to their rights and grievance avenues. Dedicated complaints and grievance redressal helplines should be initiated accompanied with mass awareness campaigns.

2. Dalits, Adivasis, women, PwD, elderly and other minorities should be represented in drought management policy and implementation committees at all levels of planning, execution and monitoring. Their participation in local governance should be enabled and strengthened.

3. Schemes should adapt to specific vulnerabilities, impacts and coping capacities Dalits and Adivasis. Clear instructions should be included in policy-level documents to ensure equitable distribution of relief material through the formation of panchayat level committees on drought management. Digressions should be penalised.

4. Fortify drought information dissemination to enable the communities to benefit from state’s response measures.

5. SHGs should be capacitated in drought preparedness, state schemes and disaster risk reduction informed village and gram panchayat development planning and monitoring.

6. Mechanisms for alternative sources of income must be strengthened to arrest involuntary migration. The funding for MGNREGS should be enhanced and the number of work-days and wages should be during drought. Schemes targeting sharecroppers, people engaged in lease farming and other informal wage-works should be developed.

7. The cultivators engaged in sharecropping and lease farming should be recognized and provided access to public credit and a range of schemes and assistance on par with landowning farmers in disasters.

8. Regular outreach campaigns should be organised to raise awareness about drought mitigation measures and their procedures.

9. PRI members and officials should be sensitised to detect community-level tensions caused by pressure of water scarcity and drought and be trained to prevent and/or diffuse potential outbursts of violence.

10. Community-level activities should be held to raise awareness of mental health issues aggravated during drought and other hazards to boost public morale and psychosocial care and wellbeing.

11. Conduct consultations with Dalit and Adivasi communities, leaders and CSOs to capture their resilience needs into State's Disaster Management, Drought Management, and Climate Action Plans, respectively.

12. Steps should be taken to ensure 100 per cent possession of identity documents by these communities, including the migrants. People should also be equipped in creating scheme-related documents (insurance, animal ownership, etc.).
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A. INTRODUCTION
The Intergovernmental Panel on Climate Change (IPCC) fifth assessment report\(^2\) warned of a warming trend in the Asian region. It observed mean annual temperature exceeding 2°C over the last century. The report sees increased pressure of water shortage in arid areas of Asia. It predicts a very high risk of this issue in near term (2030-40) and in long-term (2080-2100) with the current adaptation systems. Similarly, it sees an increased risk of drought-related water and food shortage causing malnutrition. Depending upon temperature rise—whether it is 2°C or 4°C—there can be a medium or high-level risk of drought-related problems. The Sustainable Development Goals\(^1\) (SDG) Report grimly reminds that the world is distinctly lagging from the Paris Agreement target of limiting global warming to 1.5°C above pre-industrial levels and reaching net-zero carbon dioxide (CO\(_2\)) emissions globally by 2050. The ongoing sixth assessment\(^4\) of IPCC states that greenhouse gases produced by human actions have catalysed approximately 1°C rise in temperature since the industrial era (1850-1900). It also approximates that over the next couple of decades the global temperature may rise by 1.5°C. The IPCC sixth assessment report\(^5\) recognises human influence as “the very likely main driver” of several changes such as retreat of glaciers, decrease in Northern Hemisphere snow cover, acidification of surface open ocean, dropping of oxygen levels in upper ocean levels and so on. This climate change will cause extreme changes in precipitation ushering flooding and droughts in many regions. India is clearly experiencing an increased frequency of weather-related natural disasters especially droughts, floods, cyclones, earthquakes, landslides, avalanches and forest fires.\(^6\) A recent study\(^7\) by Indian Institute of Technology (IIT) Gandhinagar predicts seven to eight-fold increase in flash droughts in India. While conventional droughts develop over months or even years, flash droughts develop rapidly. The study found that greenhouse gas emissions caused by human activities increase the frequency of extreme hot and dry climates which, consequently, catalyse flat droughts. An increased frequency of flash droughts, which can last for a few weeks or a few months, has significant implications for crop production, irrigation system and groundwater extraction in India. There exists a clear threat of climate change triggering more droughts in India.

The Working Committee Report\(^8\) on ‘Impacts, Adaptations and Vulnerability’ says that “the rise in weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt.” It says that the most vulnerable groups are disproportionately affected across sectors and regions. Social capital is a crucial factor in dealing with hazards. It states that measurement of wealth through approaches such as GDP (Gross Domestic Product) are inadequate estimates of human vulnerabilities. In places such as India

\(^2\) IPCC (2014)
\(^3\) United Nations (2021)
\(^4\) IPCC (2022)
\(^5\) IPCC (2021)
\(^6\) Government of India (2014)
\(^7\) Mishra et. al (2021)
\(^8\) IPCC (2022)
and in poorer countries of Asia, equity of economic, social and environmental resources is a big challenge. The vulnerable populations of these regions suffer greatly due to extreme climate changes due to compromised coping capacities. Therefore, not only hazards such as drought intensify poverty and related issues, they further compromise the conditions of vulnerable populations.

The Covid-19 pandemic has emphatically shown that it is the poor and the marginalised people that get affected the most. The SDG Report states that since 2020, the number of refugees, that is people fleeing their countries due to war, conflict, persecution and human rights violations, had grown to 24.5 million. This number is the highest so far. The report also states that the pandemic caused the first rise in extreme poverty in a generation. The rate of extreme poverty rose, for the first times since 1984, from 8.4 percent in 2019 to 9.5 percent in 2020.

The SDG report makes two important observations. Firstly, it recognises distinct vulnerable populations that include and are beyond the poor. Secondly, it identifies intersecting forms of distinction. International disaster agencies have largely recognised women, children, aged population, differently-abled people and refugees as vulnerable populations. Vulnerable populations are, however, a complex entity that is defined by regional realities. Caste or descent

Image A.1.1 shows the impact of the Covid-19 pandemic on global poverty level—the trajectory was projected to continue decreasing in 2019 but actually rose from 2020. The global poor rose from 119 million to 124 million. Sixty percent of these poor are from Southern Asia. These impacts will continue to multiply. The global poverty rate will be estimated to be seven percent (around 600 million people) that will miss the poverty eradication target. The SDG report states,
as recognised internationally, is an inextricable part of Indian reality. However, till recently, caste was not adequately considered in disaster management plans or studies.

National Dalit Watch (NDW), under the aegis of the National Campaign of Dalit Human Rights (NCDHR) brought out pioneering studies highlighting the nuanced reality of caste within the response mechanisms to natural disasters. An NDW report\textsuperscript{3} explains that Dalits, or the formerly untouchable caste groups of India, face discrimination by default and marginal social standing. Even in cases where there is no intentional bias against Dalit communities, the lack of knowledge about their vulnerabilities, pre-disaster mapping of these communities in the context of the disaster, and prevalent norms of assistance and operations result in the systemic neglect and imposition of the mythical concept of neutrality by the humanitarian organisations, when it is those most at-risk, ill-equipped and disparately impacted that require special and additional state assistance for faster recovery. Often this is also co-existent and accentuated with the overt and covert dominant community bias and pressures, constituting ‘Discrimination by default’. With regard to the Adivasi people, development-induced displacement and expulsion from natural resource bases where they traditionally reside amounts to default discrimination.

International and National Legal Frameworks

India is a signatory\textsuperscript{14} to the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) that prioritises disaster risk mapping, strengthening disaster risk governance, increasing investment in disaster reduction and enhancing disaster preparedness and response. In 2015, India also signed the Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change agreement for 2015-30, respectively, having bearing on disaster management and climate change mitigation and adaptation.

The National Disaster Management Act 2005 envisaged a paradigm shift from the relief-centric response to proactive prevention, mitigation and preparedness-driven approach to minimize losses to lives and livelihood to natural disasters. The following National Policy on Disaster Management 2009 provided the roadmap for disaster management encompassing climate change adaptation. The Policy recognises the involvement of community, community based organizations, Panchayati Raj Institutions (PRIs), local bodies and civil society towards building safe and disaster resilient India. Subsequently, the revised National Disaster Management Plan 2019 introduced a new chapter on Social Inclusion to provide special considerations based on gender-based vulnerabilities, conditions of SC/ST communities, the elderly, children and persons with disabilities into developing inclusive disaster management plans. The Plan mandated inter-departmental disaster relief and management.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Calamity</th>
<th>Year</th>
<th>Financial assistance approved under NDRF (in Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Drought (Rabi)</td>
<td>2011-12</td>
<td>574.71</td>
</tr>
<tr>
<td>2</td>
<td>Drought</td>
<td>2012-13</td>
<td>778.09</td>
</tr>
<tr>
<td>3</td>
<td>Drought-R</td>
<td>2012-13</td>
<td>1036.98</td>
</tr>
<tr>
<td>5</td>
<td>Drought (K)</td>
<td>2015-16</td>
<td>3638.83</td>
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<tr>
<td>6</td>
<td>Drought-R</td>
<td>2015-16</td>
<td>679.54</td>
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<td>7</td>
<td>Drought(K)</td>
<td>2018-19</td>
<td>4714.28</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>9746.59</strong></td>
</tr>
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</table>

\textsuperscript{3} Paul (2011)

\textsuperscript{14} Government of India (2017)
Drought Management in Maharashtra is encompassed within the Department of Agriculture, Cooperation and Farmer’s Welfare (DA&FW). The corresponding department in the states coordinates drought relief measures financed from the State Disaster Response Fund (SDRF). As seen in table A.11, the state of Maharashtra received Rs. 9746.59 crores for the Kharif and Rabi seasons’ drought cycles from 2011-12 to 2018-19. The quantum of allocations, as shown in the table below, has increased with each drought year alluding to the chronicity of droughts and the resources being spent on ensuring the sustenance of the affected people. The DA&FW introduced the Manual for Drought Management in 2009 that was updated in 2016. The Drought Management Plan 2017 gives an actionable framework from this manual. While there is a robust policy framework, its actualisation at grassroots level needs to be fortified through social justice and people’s empowerment-based approaches.

It is in this backdrop, that the NDW conducted a study exploring the experience of droughts among Dalits and Adivasis in the Marathwada region of Maharashtra. The study was based on the growing understanding that droughts are becoming more frequent and intense with climate change. Maharashtra has had a history of continuous droughts and it was considered necessary to understand the risks, vulnerabilities and survival mechanisms of the Dalits, and Adivasi (Pardhi) communities which are among the most marginalised communities in the region of Marathwada.
2. METHODOLOGY

i. Study Setting

Marathwada\(^{16}\), having a total area of nearly sixty-five thousand square kilometres, lies on the eastern border of Maharashtra. It encompasses eight districts—Aurangabad, Latur, Beed, Osmanabad, Jalna, Parbhani, Hingoli and Nanded. In the 2011 Census, Marathwada had a population of almost two crores\(^{17}\). The region experiences an average annual rainfall of 882mm. The rainfall is erratic in this region, and most of the region falls in the Godavari basin. Apart from the Godavari, small rivers such as Shiva, Purna, Velganga, Sindphana, Dudhna and Bindusara flow through Marathwada. Nearly thirty-two percent of Marathwada falls within the rain-shadow region. Due to these factors, Marathwada is one of the most drought-prone regions of the country. There have been twenty-two droughts in Marathwada between 1870 and 2015\(^{18}\).

Within the Marathwada area, Osmanabad district was selected for the study. Of the eight blocks of Osmanabad district, Kallam and Osmanabad were selected. Kallam and Osmanabad blocks, respectively, have the highest and the second highest population of the Scheduled Caste (SC) and Scheduled Tribe (ST) groups. Within these administrative blocks, ten villages per block were selected. In each block, five villages were explored for understanding the conditions of the SC population in drought while the other five were targeted for understanding the ST (Pardhi tribe) population. This selection was based on the corresponding population groups in the villages.

The twenty villages\(^{19}\) are as follows:

<table>
<thead>
<tr>
<th>Kallam Block</th>
<th>Total Population</th>
<th>Household</th>
<th>Osmanabad Block</th>
<th>Total Population</th>
<th>Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC-targeted Villages</td>
<td></td>
<td></td>
<td>SC-targeted Villages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Itkur</td>
<td>6,047</td>
<td>1,333</td>
<td>Kasbe Tadwale</td>
<td>9,170</td>
<td>2,127</td>
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<tr>
<td>Shelka Dhanora</td>
<td>1,304</td>
<td>317</td>
<td>Ter</td>
<td>12,479</td>
<td>2,645</td>
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<tr>
<td>Kothlwadi</td>
<td>987</td>
<td>226</td>
<td>Ramwadi</td>
<td>1,641</td>
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<td>Hasegaon</td>
<td>1,362</td>
<td>283</td>
<td>Samba</td>
<td>2,047</td>
<td>464</td>
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<td>Massa</td>
<td>4,361</td>
<td>955</td>
<td>Kajala</td>
<td>2,856</td>
<td>604</td>
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<td>ST-targeted Villages</td>
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<td></td>
<td>ST-targeted Villages</td>
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<td>Andora</td>
<td>3,721</td>
<td>902</td>
<td>Dhoki</td>
<td>15,303</td>
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<td>Ter</td>
<td>12,479</td>
<td>2,645</td>
</tr>
<tr>
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<td>1,325</td>
<td>Bukanwadi</td>
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<tr>
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<td>1,488</td>
<td>Waruda</td>
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<td>465</td>
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<tr>
<td>Govindpur</td>
<td>2,753</td>
<td>572</td>
<td>Hinglajwadi</td>
<td>1,861</td>
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</tr>
</tbody>
</table>

\(^{16}\) Map sourced at South Asia Network on Dams, Rivers and People (2015)
\(^{17}\) Government of India (2011)
\(^{18}\) Seetharaman (2016)
\(^{19}\) Indian Village Directory
The study setting selections were made based on literature review and consultation with subject matter experts of the region. These experts include district-level officials as well the faculty of Tata Institute of Social Sciences (TIISS) located at Mumbai, and Tuljapur, Osmanabad.

ii. Objectives

The study aims to bring out actionable evidence to enable the state response to drought be more attuned to the needs of the most vulnerable population, as envisaged in the legal frameworks. For this purpose, it specifically attempts to:

1. Understand the preexisting vulnerabilities of the Dalit and Adivasi communities
2. Understand the impact of drought on the Dalit and Adivasi communities
3. Recognise the coping mechanisms of the Dalit and Adivasi communities during droughts
4. Assess the coverage and efficacy of the current the current drought management system in the State

iii. Methods

The study adopted a mixed methods approach. A household survey was supported by focus group discussions with specific constituents of the studied communities. Purposive sampling method was employed for the selection of respondents. A total of 2207 households were surveyed. Interview participants were selected from diverse cross-sections of gender, age and occupation. Eight focus groups were conducted with women, children, differently-abled, senior citizens, labourers, marginal farmers, migrant labourers and a mixed group representing various intersections. Only SC and ST members were targeted for this study.

Tools

The survey was conducted in the local language—Marathi. Before conducting the survey, the interview schedule was tested with a pilot study group from the targeted population. This enabled checking redundancy, identifying validity and relevance of questions and locating gaps in the information. The interview schedule was modified as per the results of the pilot study. The respondents from pilot test were not considered in the sample of the study.

iv. Respondent Profile

The respondent profile is almost equally divided between males (59%) and females (41%). 44% of the respondents belong SC community while 56% are from ST groups. Most of them are

![Graph A.2.iv.1 RESPONDENT PROFILE: IMPORTANT FEATURES (PERCENTAGE)](image-url)
married, are engaged in agriculture and have an average monthly household income below Rs. 5000. The monthly family income of 70% of the SC respondents and 78% of the ST respondents is less than Rs. 5000.

**Sub-castes**

From the SC respondents, majority (55%) belong to Mahar community. Those from Matang community form the second largest SC group of respondents. The castes of such as Chambar, Bhaambhi and Mang-Garodi are represented within the respondent group. Pardhi community makes up the largest majority of ST respondents (97%). 37 of the ST respondents (3%) are from Koli-Mahadev community. All of the Koli-Mahadev respondents belong to Osmanabad.

**Familial Features**

While 89% of the total respondents are married, 9% of the female respondents are either widows or divorced. Another 5% of the female respondents are single (unmarried). Majority of the respondents stay in a nuclear family system (68% for ST and 54% for SC). This is followed by a trend of joint family system (29% for ST and 38% for SC). 2% of the family types are ‘single-woman’ households.

**Domicile Age**

More than 75% of the respondents have been living in their respective villages for more than 26 years. 16% have been staying in their villages from between 21 to 25 years indicating they are first generation migrants to their village (either by marriage or other reasons).

**Livelihood**

The primary occupation of the participants is within the domain of agriculture. 75% of the respondents are engaged in agriculture-related activities. Within agricultural activities, majority, that is 60%, are engaged as labourers. 20% are occupied in allied activities. 84% of the SC respondents are engaged in agriculture and allied activities compared to 39% of the ST respondents. 13% of the respondents undertake sugarcane-cutting or harvesting for livelihood. 28% of the ST respondents are engaged in sugarcane-cutting while only 3% of the SC respondents do the same. Only 3% farm on their own land. While only 1% of the SC respondents farm on their own land, 12% of the ST respondents do so. Only 4% of the total respondents are engaged in sharecropping, which alludes to serious unavailability of land or the means to acquire temporary possession (leasing or sharecropping) to cultivate crops for subsistence
and income as practiced widely in other states by the landless communities, besides working as agricultural labourers. 3% of the respondents were self-employed and an equal percentage identified themselves as ‘unemployed.’ The remaining 19% of the respondents avail off the livelihood options such as sanitation work, scrap-dealing, hunting, begging, MGNREGS and work at private institutions.

Graph A.2.iv.4 AGRICULTURAL ACTIVITIES (PERCENTAGE)
3. SITUATING THE STUDY

Data collection for the study took place in the latter half of 2021 when the world was embroiled in the Covid-19 pandemic. The pandemic affected India strongly not sparing rural areas and intensely affecting the poorest and most marginalised populations, particularly in the second wave. The country witnessed large-scale reverse distress migration—from cities to villages. Within this unique rubric, several challenges occurred during data collection owing to strict regulations on movement, not to mention the fear among the villagers in interacting with the outsiders. Therefore, a research and data collection team comprising locals from the study region was put in place. An identification letter issued to the enumerators by the Tata Institute of Social Sciences secured cooperation from the local authorities while visiting the villages.

A positive outcome of these challenges is that the study has captured various unique phenomenon that happened due to the pandemic. Nonetheless, it was restricted by certain methodological limitations. The study operated from the core objective of exploring the conditions of Dalits and Adivasis in a region afflicted by chronic drought. As such, it leaves the ground tilled for several specific studies. For example, the study captured caste-based discrimination and violence; violence faced by women and intersectional groups such as senior citizens; unique issues of migrants; and tendencies of addiction, depression and suicide. It was beyond the scope of this study to probe deeper into these various phenomena. There is also scope to closely study how policy addresses unique conditions and needs of Dalits and Adivasis and specific vulnerable groups from marginalised communities.
B. FINDINGS
1. PREEXISTING VULNERABILITIES

Nature does not discriminate between people. However, structural inequalities in a society ensure that calamities are suffered varyingly by different groups of people. Certain groups exercise control over a larger and unequal share of economic, social, political and cultural resources. The groups on the other end of the spectrum, also called the ‘marginalised’ groups, control the least of resources. They are left with limited choices of habitation, community resources and livelihood, and are, thus, more susceptible to prolonged and deeper impacts of natural calamities. The study recognises caste and descent as the foundational cause of vulnerability that determines the experience of droughts. The other vulnerabilities are gender-based, economic and political. Intersectionality such as age (senior citizens and children) and disabilities influence the preexisting vulnerabilities. This group suffered due to their physical and age-related vulnerabilities.

i. Caste-induced Vulnerabilities

“The village has different places of residence for people according to caste. People belonging to Scheduled Castes and Scheduled Tribes live far from the main settlement.”

This was said by one of the focus group participants. The study found the reality of caste permeating in all aspects of daily community life.

Caste-based Discrimination

From those who reported having faced discrimination based on their social identity, 10% of the ST respondents shared they had faced discrimination while 4% of SC respondents said so. The actual incidence of discrimination will be higher than this reported percentage. This statistic, however, undeniably brings out the grassroots level evidence of caste-based discrimination. The highest reportage, of half the respondents of those who reported discrimination in the first place, has been the subtlest form of discrimination—untouchability. 56% of the SC respondents who

<table>
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<th>Table B.1.i.1</th>
<th>Types of Discrimination (Percentage)</th>
</tr>
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<tr>
<td></td>
<td>Untouchability</td>
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<tr>
<td>SC</td>
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<tr>
<td>ST</td>
<td>48</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

15% fear or have faced caste-based violence while accessing public services

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20 Caste and other social origin-based discrimination are identified with discrimination based on work and descent as defined in paragraph 1 of the draft UN Principles and Guidelines for the Effective Elimination of Discrimination based on Work and Descent, further confirmed by other UN treaty and charter-based bodies.

21 Refer to discussion in Conclusion
had reported discrimination, shared that they had experienced untouchability. 48% of the ST respondents also said so. It is notable that 17% of the ST respondents stated that they had been labelled as thieves during their lifetime spent in their respective villages. Moreover, 15% percent of the respondents reported that they feared facing or in the past have faced violence while accessing public services in the drought period. Violence is the most assertive and visible form of caste discrimination.

**Unfair Relief Distribution**

During calamities the inherently present caste biases directly translate into discrimination in distribution of relief materials. Graph B.1.i.2 shows that the average quantity of water and relief materials accessed by Dalits and Pardhis is compromised. 14% of the ST respondents shared that they had been last to receive or experienced a delay in receiving relief materials. Relief materials include emergency water supply, fodder, power supply for agriculture and subsidised agricultural inputs such as seeds. Additionally, drought-affected farmers are entitled for input subsidy for crop loss of 33% and above at the rate of Rs. 6800/- per hectare for rainfed areas, Rs. 13500/- per hectare for areas with assured irrigation and Rs. 18000/- per hectare for all types of perennial crops. Overall, 21% of the respondents stated that they had received relief materials in an unequal or less than prescribed amount. Among these, 36% of the SC respondents said so compared to 16% of the ST respondents.

**ii. Gender-based Vulnerabilities**

74% of the study participants reported an increase in workload due to drought. Among these, 31% said that fetching water takes longer as nearby water sources dry up during drought. 18% said fetching firewood takes longer as nearby vegetation dries up during drought. 11% said they had to stay back at home to take care of family members. The incidence of children, senior citizens, differently-abled members and migration returnees staying back at home increases during drought. This is more so since the Covid-19 pandemic. Women are the bearers of all the three mentioned tasks.

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22 Government of India (2017, pg. 45-54)
23 ibid. pg. 49
In the focus group with women, participants confessed a sense of exhaustion. They mentioned that women in the family are the central link between the husband, children and other members. In addition to being responsible for physical chores women also tend to absorb stress in the family. The women also face familial violence. The incidence of open defecation is high in this area which exacerbates during drought. The study recorded a 4% increase in open defecation during drought, and the women face the absolute brunt of lack of toilets.

### iii. Economic Vulnerability

A very pertinent finding of this study is the centrality of financial concerns. The study reveals that this area suffers from a chronic issue of income scarcity which gets exacerbated with drought. Qualitative and quantitative data emphatically point towards this phenomenon. Participants repeatedly mentioned their need for employment and alternative livelihoods. When asked about their priorities during drought season, focus group participants said,

“Undertake efforts to get employment so that we can fulfil our daily needs.”

Economic vulnerability is characterised by the conditions the respondents exist in. Of the total respondents, only 4% have pucca house while the rest 96% dwell in kuccha houses. Only 58% own their homestead land. Moreover, 30% of the respondents did not own the title of their house as they were living either on government land or in unauthorised or unrecognised settlements. Overall, only 49% of the total respondents had electricity connection. ST respondents cited non-ownership of land or dwelling in unauthorised settlements as a major cause of not having electricity connection. The same financial constraints were reported by the SC respondents.

Overall, only 47% of the respondents have piped water connection. A measly 23% of ST respondents and 72% of SC respondents have piped water connection.

The paucity of income is clearly visible in the study findings. 75% of the respondents—71% SC and 78% ST—reported their monthly household income below Rs. 5000. Only 3% (2% SC and 4%
ST) had a monthly income above Rs. 10,000 while 22% (27% SC and 18% ST) had that between Rs. 5000 and Rs. 10,000. 60% of the respondents had around 4-6 members in their families while 25% had up to three members. Thus, majority of the respondents have an average family size of 4. This approximately points to per person monthly income of Rs. 1250. Thus, income per day per person is around Rs. 40 and below. This number will further come down if the average family size is considered as ‘5.’

**iv. Political Fragilities**

The study found a very deep level of unawareness about the rights and public services. 88% of the respondents said that they were unaware about the government’s drought mitigation plan and programmes. 97% of the respondents who experienced loss of cattle did not receive compensation for the same. Among these, notably, 33% failed to undergo the required bureaucratic procedure. A sizeable chunk, 9%, did not possess government-recognised ownership documents of the cattle. 35% were even unaware that compensation for such loss was present. 31% said that they were aware of the compensation but it was not declared during their period of livestock loss.

The study unveiled a very limited participation of people in the local governance process. 68% of the respondents did not participate in the Gram Sabhas. Of these, 81% of the ST participants and 55% of the SC participants did not attend the Gram Sabhas. In the focus groups, participants said, 

"It is not clear when the meetings in the gram panchayat are held."

<table>
<thead>
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<th>Reason</th>
<th>Details</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
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<td>Lack of Information</td>
<td>Scheduling</td>
<td>21</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Purpose</td>
<td>17</td>
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</tr>
<tr>
<td>Unavailability of Time</td>
<td></td>
<td></td>
<td>35</td>
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<tr>
<td>Exclusion</td>
<td>Issues not Considered</td>
<td>14</td>
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<tr>
<td></td>
<td>Discriminated Against</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>Feared Upper Castes</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Migration</td>
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</tbody>
</table>

Not surprisingly, 35% said that they did not have time to attend Gram Sabhas. 38% of the respondents did not attend Gram Sabhas due to lack of information. Of these, 21% said that they did not receive information about the scheduling—the date and time—of Gram Sabhas. 17% said that they were unaware about the purposes of the Gram Sabhas.
19% felt a pertinent exclusion in previous Gram Sabhas and, therefore, discontinued attending subsequent Gram Sabhas. Of these, 14% said the issues raised by them were not considered. 3% felt they had been discriminated against in the Gram Sabhas. 2% very clearly expressed the fear of dominant caste people in the Gram Sabhas. 8% could not attend the Gram Sabhas as they had migrated out for work or were not residing in the village during Gram Sabhas.

In the focus groups, the participants clearly expressed that their participation was only for ‘name-sake.’

“Our participation is only for namesake. Our issues, questions, problems and demands are not taken into consideration by the panchayat head or administrators of the local bodies.”

Of those respondents that said they attended Gram Sabhas, only 47% stated that they had raised drought-specific demands. From these, 35% had raised demands for household water supply. 19% had requested generation of alternative livelihood sources. 18% had demanded work under MGNREGA. 10% had pointed out that they needed to be enrolled in the PDS. 5% had made demands in concern of women and children. 4% had requested irrigation support in their agricultural fields.

In the focus group with women, participants said that even though they do attend the Gram Sabhas, they do not make demands.
v. Physical and Age-related Vulnerabilities

The study found that certain groups are more vulnerable to the effects of drought due to physical and age-related conditions. In the focus groups, senior citizens and people with disability (PwD) expressed physical hurdles to reaching the points of service (such as the banks). Physical hurdles imply bodily weaknesses or disabilities of commuting to the bank. As one of the participants in the senior citizens focus group said,

“It is not easy to walk or travel at this age.”

This affects their abilities to avail services such as pension. Both senior citizens and persons with disability (PwD) expressed the sentiment of being a ‘burden.’ They expressed that drought causes financial pressure on the family. In this situation, they feel they add more responsibilities on their relatives. For example, some of the persons with disability shared that one family member had to always stay back at home to take care of them. This family member was forced to stay unemployed, thus adding to the number of dependents in the family. There also emerged a hint of violence against these vulnerable groups. The participants refrained from making any clear remark on their relatives. However, they did say—

“Older people are said to be the backbone of the family but very few people practice it. In some families, the elderly are despised but no one talks about it openly.”

Children expressed a lack of agency. In the focus group they shared that decision to discontinue their education was taken by the head of the family—the patriarch. The of focus group with women emphasised the lack of high schools in their villages. As a result, children had to commute to Osmanabad for further schooling. In such situations too, girls get affected the most. If one girl child drops out and stops commuting to the high school her girl companion is also forced to drop out.

An outcome of school dropouts is early marriage of girls. In the focus group with women participants, they shared that during pressure situations the bar of education goes further down for girl children. As girls cannot be “kept at home idle,” the families prefer to marry them off.
2. IMPACT OF DROUGHT

Against the pre-existing vulnerabilities, the study explored the participants perception and experience of drought and their psychosocial state during drought.

i. Economic Impact

Drought has a drastic economic impact on the region. This impact is complex; its constituents are layered and interconnected. A focus group participant put it aptly,

“All elements of society are affected by drought because they are dependent on each other. The imbalance of nature affects every element of creation. If there is good rain, agriculture will be good, labour will be available, fodder will be available to the animals, youth will get employment, people will have regular income, so financial problems will not arise. The basic needs of the people will be met.”

The study respondents shared that the impact on agriculture is the major blow. The region being a dry land, the drought conditions cause the water level to decrease. This is particularly so during summer. Irrigation facilities such as drip system and sprinklers are limited here. This leads to lower production capacity of the land and, therefore, lesser crop yields. Study respondents mentioned,

“Planned work is not completed on time.”

The disturbed agricultural cycle has a domino effect on all other aspects of life. People have to seek other livelihood options or migrate, and small businesses close down. The pressure is also added by rising inflation and cost of petrol and other utilities. Increased unemployment of youth is an aspect of this domino effect.

67% of the respondents (67% SC and 66% ST) said that they had difficulty finding work during drought. 59% said that work in itself was not available. Work here implies their usual livelihood activities. As seen in section A.2.iv Respondent Profile, most are involved in agriculture and allied activities. This reveals that drought hampers agriculture and, thereby, negatively impacts livelihoods of a majority. 20% said that they depended on MGNREGA as a livelihood option and the allocation of work under this scheme gets delayed during drought. 18% could not get work due to lack of documents.

65% of the respondents felt a high to very high reduction in household income. 50% shared that they had experienced high to very high levels of indebtedness.
ii. Psychosocial Impact

The study respondents described multiple aspects of psychosocial impact. In the focus groups they particularly mentioned a growing tendency towards addiction caused by drought-related stress. They also shared that there were increasing instances of depression. Suicides, especially among farmers, are not uncommon. Nearly 50% of the respondents felt a high to very high level of hopelessness and a sense of loss caused by drought. 40% felt that drought contributed towards a medium level of this dreariness. 10%, however, felt that drought had a low psychological impact. 47% of the respondents said that they had witnessed a high to very high level of impact on conflicts in the villages caused by drought. 41%, however, said drought had medium impact on water-related conflicts. 10%, on the other hand, felt that drought had a low impact on water conflicts.

Violence faced by Women

One-fifth of the 905 surveyed women felt a marked increase in violence inflicted upon them. These women confidently associated the violence with drought-induced stress felt by their abusers. Of these women, half of them reported psychological stress, independent of as well as linked to violence faced by them during the drought season. Nearly 25% of these women
reported having faced verbal abuse. Around 10% said they had faced physical abuse while around 5% reported sexual abuse. This data concerns violence faced by women within their households. The perpetrators therefore include husbands and male relatives. As women said in the focus groups, “the woman is the central link between the husband, children and other members of the family and she is responsible for looking after the whole family’s need. And in this exercise of balancing family’s needs she gets exhausted and she has to compromise on her requirements.”

The ‘sponge’ is a good allegory of this feeling expressed by the focus group women. Women are sponges that absorb the family stress.

Violence Experienced by Senior Citizens

As mentioned in section B.1.v Physical and Age-related Vulnerabilities, the study participants did not directly allude to violence experienced in families. They, however, did mention a specific intervention from government to build old age homes as, “no one speaks openly about violence against the family in old age.”

The study participants mentioned that they endeavour to resolve conflicts at family level rather than resorting to Panchayat head, police or local authorities. They had no knowledge about any elderly helpline.

Impact on Schooling and Children

The drought affected the lives of children. 38% of the respondents opined that drought had a medium level of impact on children’s schooling. 26%, however, felt it had a high impact while 27% said drought had a very high impact on schooling. Schooling children is a cost to the families. Due to financial pressure of drought families are forced to drop children out of school—either to contribute to household chores or earn income for the household. The study participants mentioned that this pressure was enhanced during the Covid-19 pandemic due to new expenditures on internet and mobile phones and tablets.

In the focus group with children, participants mentioned a clear lack of decision-making ability. They felt they had the least amount of power within the family system. They said,
“We depend on our parents. We have to live a lifestyle that our parents can afford, we have to adapt to situations the family is going through and eat what we are provided with without complaining.”

They felt that the head of the household, the patriarch, had the most power in the household. They further shared that this person also had to face the highest amount of stress. They said,

“He is more affected. He is the one who has to take harsh decisions such as dropping the children out of school, be frugal with everything and manage within limited resources.”

They also explained that boys were dropped out to work as daily wage labourers on farms and construction sites to supplement family income. Girls were held back from school to contribute to household chores, fetch water and look after younger siblings. Besides, the girls were also married off to reduce the number of dependents in the family.

However, a related effect of drought is the added pressure of marriage expenditure. Some focus group participants shared that they were stressed due to lack of funds to marry off their wards. Unemployment had a double-effect on males—in addition to causing them financial stress, unemployed males faced difficulty in finding life partners.

### iii. Health Impact

67% of the respondents said that incidence of illnesses and overall health expenditure goes up during drought. 27% said their family healthcare expenditure turned out to be between Rs. 5000 and Rs. 50000 in a year. 75% opined that incidence of malnutrition increased due to drought.

The respondents felt a very pertinent impact of drought on their family’s health and nutrition levels. 31% felt that drought caused a medium level of malnutrition. However, 40% felt that drought caused high to very high levels of malnutrition. On the other hand, 42% said they witnessed a medium level of health impact of drought. Nearly 50% felt drought caused high to very high levels of health impact.

![Graph B.2.iii.1 HEALTH IMPACT OF DROUGHT (PERCENTAGE)](image)
3. COPING MECHANISMS

Drought is a chronic condition in Marathwada. The people are completely aware of the symptoms of drought, and know whether to expect drought that particular year. Based on this well-informed approximation, they undertake some measures to prepare for drought. They also adopt certain coping mechanisms to deal with an ongoing drought. The study captured some of these preparation measures and coping mechanisms. As seen in Graph B.3.1, most of the respondents, i.e., 72% stated that they sought alternative livelihoods. Agriculture, which is the main subsistence activity (as described in section A.2.iv Respondent Profile), gets severely disrupted by drought conditions.

Hence, to generate income, people have to explore other income-generating options. 50% of the respondents said that they try to keep aside some money to face the drought conditions.

Around 31% said they store crop harvest to deal with food scarcity during drought. They also save crop residues that can be used as fodder for livestock. 32% said that they sell livestock to deal with income scarcity. 27% of the respondents said that they borrow money.

i. Indebtedness

Undertaking loans is a prominent coping mechanism. The study respondents said that loans are important because,

“Agriculture is a time-sensitive activity that requires working capital. If one is facing money crunch, a way out is to take a loan.”

The respondents shared that they took loans from both—formal avenues such as banks and non-banking financial institutions and informal avenues such as local moneylenders. Some of these avenues required and accepted collaterals such as land, jewelry and other valuables. The rate of interest on a bank crop loan is 9.8% per annum. However, if the same loan goes into arrears, the rate of interest goes up to 12.5%. Self-help groups provide loans at a rate of 3%. The rate of private lenders varies between 4-10% and is influenced by the strength of acquaintance between the lenders and borrowers.
ii. Compromises on Expenditures

Reduction in expenses is a logical step followed during any financial crisis. The study found the people shrunk their household budget by undertaking a few hard steps. One of these steps, as mentioned above, is dropping their children out of schools. This strategy not only saves the expenditure of schooling but also adds to the household labour force—either in contribution of chores or in contribution to income. Study participants stated that they also cut down their social expenditure. One-third of the respondents shared that they observed a high reduction in expenditure on festivals and social functions such as marriages. An equal number felt a medium reduction while another one-third stated a very high reduction.

Food Choices

Nearly 40% of the respondents expressed that they experienced a medium level of limitation on food choices. 30% said that they experienced a high level of limitation while 25% said that they felt a very high limitation. Compromising on food choices is a mechanism to deal with drought. This points to the forced frugality introduced by drought. Participants of women’s focus group shared,

“We have to be frugal in everything we do.”

The forced austerity in food items causes starvation and malnutrition, affecting young children’s health even more.

iii. Water and Sanitation

Water is a precious commodity during drought. As seen in expenditure of money and in food choices, the respondents also maintain frugality in usage of water. 60% of the respondents said that they engaged in open defecation even in pre-drought conditions, while 40% said that used toilets. During drought conditions, 4% from toilet users shifted to open defecation. People, therefore, largely stuck to their habits. This points to lack of water availability and financial vulnerability. It should, however, be noted that a majority opt for open defecation.
iv. Fodder Management

74% of the respondents said that they did not own cattle during the drought season. Animals owned by the rest of the respondents are mostly cows and sheep, including also bullocks, goats, pigs and camels. Therefore, 16% overcame fodder scarcity by procuring fodder for their cattle from fodder camps, whilst 6% said that they purchased the fodder either from the market or other farmers. Only 4% said that they had fodder available with them.

v. Migration

Migration is one of the most significant coping mechanisms. 24% said they migrate to other regions where livelihood options are available. The study reveals that more people from the ST community migrate in the region. 39% of the ST respondents said that they migrate compared to 9% of the SC respondents. Of those who migrate, most (73%) take their family along.

From those migrating, 46% migrate for four to six months, while 30% migrate for seven to nine months. 20% said they migrate for only one to three months. 5% stated that their migration lasted for twelve months or more. Interestingly, more respondents from the SC community (14%) compared to ST respondents (3%) said that they migrated for a year or more.
Migration Issues

Migration brings with it several issues. Migrants face challenges at their migration destinations as well as back home. During migration, 25% face the problem of not having a steady accommodation. These respondents even faced homelessness. 15% of the respondents said that they were not able to enroll their children in schools. 12% could not satisfactorily access public health services. 15% faced challenges in accessing the PDS at their migration destination or even back home. Despite undertaking the painstaking effort of migration, 9% received low wages for their work and 10% said they had unstable livelihoods.

In addition to the above problems, some respondents of focus group said they had been evacuated from their homes. Some could not access public toilets. The respondents shared they had been assaulted by other people at their migration destinations. Some had been harassed by people and even falsely implicated in theft cases.

Senior Citizens in Migration

348 of the respondents, that is, 16%, are above the age of 60 years. Most of the senior citizens (82%) do not migrate with their families. When they are left behind by migrating families, they support themselves by working. Among the working senior citizens, most engage as daily casual labourers. These are majorly those not receiving the pension (52%). They do seek help from their neighbours for their health and other needs whilst their relatives have migrated. Some of them do have to take care of children left behind by the families, as came forth from focus group discussion.
4. DROUGHT MANAGEMENT

The study reveals a yawning gap in implementation of the drought relief measures as pointed out by the participants. While the State carries out several drought prevention and mitigation measures both in the form of social security schemes and conservation and infrastructural programmes, the study dwelt on the most primary schemes essential for basic human survival. A whopping 93% said that they had not benefitted from drought mitigation measures, which is confirmed by massive unawareness about the drought mitigation plan and programmes, reported earlier. Those who are aware of these measures said,

“Yes, we do know about the measures and we have benefited from some of them. But the drought is declared too late, help is received too late.”

Some respondents shared that they were registered for drought mitigation measures such as crop insurance. However, they do not avail these benefits due to the oppressive conditions within the service machinery. For example, the insurance institution does not compensate crop failure loss unless the latter is reported within 72 hours. The procedure to report this loss is so complicated that most farmers lose out. In the local governance system, demands of the people are not taken into consideration and village development plans do not reach them. A specific unmet demand of building community centre in the village was raised by the study participants. Thus, there exist severe drawbacks in the drought management system and the related public machinery that exacerbate the drought experience of these communities. The study identified pertinent gaps in the system in the domains described below.

i. Water Sourcing and Management

72% of the respondents said that they did not have adequate water for drinking and maintaining hygiene during drought. During severe water shortage and drought conditions, the people mostly (63%) manage their daily routine needs by sourcing water from public water bodies. About one-third (32%) respondents sourced water from wells of other villagers and farmers. 5% sourced water from private tankers.
These water sources were located within 250 metres for about half (54%) of the respondents. The sources were at about 250 to 500 metres for 26% of the respondents, while 18% of the respondents had to walk 500 metres to one kilometre to access water from their sources. While certain activities such as washing clothes and bathing (more restrictions on females) can be conducted at the water source itself, drinking water has to be carried back home. Therefore, the daily commute for fetching drinking water is twice the distance mentioned here. Qualitative data relevantly points towards girls and women as the bearers of this task.
It seems that a majority of the people in the area employ neighbourhood water sources to fetch water during pre-drought season. 53% respondents from Kallam said they use neighbourhood water sources compared to 29% from Osmanabad block. It can be said that Kallam block probably has more neighbourhood water sources. 43% from Osmanabad block said that they used other water sources such as hand pumps and taps to fetch water. On the contrary, only 1% from Kallam said so. Kallam seems to lag behind in number of hand pumps and taps. 30% from Osmanabad stated that they used government tanks compared to only 5% from Kallam. Osmanabad, therefore, seems to have more government water tanks available. 10% of the total participants said they used private borewells in agricultural fields to fetch water. This disaggregated to 13% from Kallam and 6% from Osmanabad. 14% from Osmanabad mentioned the use of school water tanks compared to just 2% from Kallam. Osmanabad, thus, seems to have more school tanks than Kallam block. This is tangential with natural body distribution in Marathwada region mentioned earlier.

**ii. Health Service**

Only 11% of the respondents said that they were enrolled in any of the public health schemes. The distribution of enrolment in different schemes is given in Graph B.4.ii.1. 58% of them have subscribed to Ayushman Bharat– the national health scheme that provides an annual health cover of Rs. 5 lakhs per family for secondary and tertiary care hospitalization to beneficiaries based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC) for rural and urban areas respectively. 30% are enrolled in Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY) while only 2% are enrolled in the Indira Gandhi Sahyog Matritva Yojana (IGSMY). The remaining 10% are enrolled in smaller combinations in health schemes.

59% of the respondents said that they did not receive satisfactory public healthcare service during strained financial conditions (income scarcity...
and absence of work) of drought. Yet, around 76% of the respondents accessed various public healthcare service divisions such as PHC, CHC, health sub-centre, district hospital, ASHA workers and ICDS. 20% said that they accessed service from private doctors during drought. Around 3% availed alternative medicine or services of temple priests or traditional healers.

### iii. Social Security Scheme for Senior Citizens

16% of the respondents were above the age of 60 years. Of these, only 48% are beneficiaries of old age pension scheme. Almost all of those who receive pension (96%) receive it on time. Those that do not receive on time, face challenges of commuting to the bank. The pandemic disrupted the pension of some. Some said that they could not visit the bank to collect their pension.

### iv. Cattle Loss Compensation

26% of the respondents did own cattle during the drought. 3% of the overall respondents stated that they had experienced loss (death) of cattle during drought, but majority of them had not received any compensation for their loss. When asked about the reasons of not receiving compensation, notably, 33% failed to undergo the required bureaucratic procedure. A sizeable chunk, 9% of those who faced livestock loss, did not possess government-recognised ownership documents of the cattle. 35% were even unaware that compensation for such loss was present. 31% said that were aware of the compensation but it was not declared during their period of livestock loss.

| Table B.4.iv.1 Non-reception of Cattle Loss Compensation: Causes |
|---------------------------------|------------------|
| Vulnerability                   | Percentage       |
| Unaware of the Bureaucratic Process | 34               |
| Unaware of Compensation Availability | 35               |
| Unaware of Compensation Declaration | 31               |

### v. MGNREGS Enrolment

An incredible 80% of the respondents (70% SC and 89% ST) were not enrolled in the MGNREGS. 60% of the unenrolled respondents said they were unaware about the scheme. 15% said they knew about the scheme but were unaware about the procedure to enroll. 19% said they found the wages in this scheme too low. 3% felt that they had to demand work and wait for too long.
to get work. 3% said they did not require enrolment as they had other sources of livelihood (government or private job or own business).

vi. Identity Documents

Around 8% of the respondents (6% SC and 9% ST respondents) do not possess a ration card. Of those who possess ration card, 80% have the yellow-coloured one—issued to those belonging to the BPL category and 20% have orange-coloured one—issued to those having an annual income between Rs. 15,000/- and Rs. 1 Lakh. Of those who do not possess ration card, 55% do so due to lack of required documents, 18% because they are landless, and 23% because they migrate for work or do not have a permanent residence. Not having ration card leads to issues such as limited access to rations distributed through the PDS and inability to enroll in government schemes, which places an additional layer of vulnerability and stress during drought.
C. CONCLUSION
1. IMPLICATIONS

Chronicity is the central word here—it captures the whole reality of the ecosystem of Droughts, Dalits and Adivasis and Marathwada. Unlike most parts of the world where climate change is ushering bouts of extreme weather conditions and natural hazards, Marathwada is experiencing a gradual intensification of drought conditions. The nuances of this chronicity are captured below.

i. Drought and the Accelerating Marginalisation

Caste and tribal identities are the most significant causes for preexisting vulnerability that has an all-round effect. The intersectional groups of women, senior citizens, PwD, migrants and children face more severe consequences. Economic impact further brutalises the experiences of these categories. The marginalisation captured by this study is given as below.

All-permeating and Omnipresent Descent-Based Prejudices

Descent or social identity determines the experience of drought. Overall, 7% of the respondents—10% ST and 4% SC—reported caste and ethnicity-based discrimination. Several studies have shown that discrimination is often under-reported\(^\text{24}\) due to fear and internalised patterns of social hierarchy. It was beyond the scope of this study to explore deeper into the reportage of such statistics. Of the respondents who reported discrimination, half pointed towards untouchability. The Mahars, the Matangs and the Chambhars, comprising of 55%, 38% and 6% respectively of the SC respondents on this study, the so-called untouchable castes\(^\text{25}\) of Maharashtra. Of these, the Matangs are the most backward facing the most intense\(^\text{26}\) untouchability. Sudharak Olwe\(^\text{27}\) who documented the lives of Pardhis writes that, "... while the rest of India celebrates its independence on August 15, these denotified tribes consider August 31 as their day of independence." In 1871, along with 150 other tribes, the Pardhis were classified as 'criminal tribes' by the colonial government for protesting against the latter. The Pardhis were\(^\text{28}\) "... segregated and forced to live in camps outside the village limits, facing extreme poverty, displacement and discrimination." The Criminal Tribes Act was repealed on August 31, 1952 and these tribes were denotified. However, the Pardhis still struggle to shake off the criminal tag stuck to them. This study found that 17% of the ST respondents, from those who reported discrimination, stated that they had been labelled as thieves. This finding is uniform in other domains too.

In addition to facing several access-related issues, the migrating respondents reported having faced home evacuation, physical assault, police harassment and false implications in theft cases. Thus, the Dalits and the Adivasis face the demonic reality of caste-based discrimination in not just their villages but also at their migration destinations. Additionally, the historical segregation

\(^{24}\) Khubchandani et. al (2018) and International Dalit Solidarity Network (2022)
\(^{25}\) Waghmare (2010)
\(^{26}\) ibid.
\(^{27}\) Olwe (2018)
\(^{28}\) ibid.
from main village continues—the study respondents stated that their settlements are far removed from main village is a testament to this reality.

The reality of caste is not just restricted to the villages but extends to all echelons of the society that includes government officials and people’s representatives. The discriminatory bias the dominant caste officials carry, consciously or unconsciously, inevitably reflects in their disposition of duties. These duties include their actions during drought mitigation processes. 36% of the SC respondents reported receiving relief materials in an unequal or reduced quantum. 14% of the ST respondents said they had been last to receive or experienced a delay in receiving relief materials. 68% of the total respondents stated that they did not attend Gram Sabhas. Of these, 19% did so because of the pertinent exclusion they experienced during Gram Sabhas—their issues were ignored, they had experienced direct discrimination in the meetings or they feared the dominant caste members who dominated in the meetings.

The relief process also seems to be structured in a manner that the marginalised communities received relief materials at the fag end of the distribution chain. This, unfortunately, indicates that the dominant caste groups could take maximum advantage of the relief process, both, in quantity and time. This data clearly demonstrates that caste/ethnic identity determines and enhances a particular group’s vulnerability by limiting the capability to cope with and recover from drought. Also, the large-scale landlessness and casualised labour deprives them of the opportunities of creating assets to breach the boundaries of multifaceted deprivations and vulnerabilities.

Caste is omnipresent; it permeates all strata, regions and domains of the society. The suffering of the vulnerable groups, intensified manifold in the chronically ailing ecosystem of drought.

**Intersectionalities in Aridity**

The study identified certain sub-groups within the overall respondent group of Dalits and Adivasis. Presenting with unique issues, these groups face double vulnerability—of their caste or ethnicity and their own gender, age or physical abilities.

**Gender-based Violence**

The study emphatically captures violence experienced by the intersectional groups. The secondary position of females in society is replicated at the household level. 25% of the female study participants reported an increase in violence inflicted upon during drought period. Nearly 25% of these women reported having faced verbal abuse. Around 10% said they had faced physical abuse while around 5% reported sexual abuse. The abusers were mostly their male family members. The study also points to the possible violence carried out by able-bodied family members on senior citizens. Thirdly, 15% of the respondents reported they feared facing or in the past have faced violence while accessing public services in the drought period. This continues from the argument made above. The Dalits and the Pardhis face backlash while negotiating resources during the droughts. These findings demonstrate that caste is in actuality an institutionalised reality.29

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29 Chaudhry (2013)
Recurring Challenges

Apart from violence, the intersectional groups of women, senior citizens, differently-abled people and children face several recurring challenges caused by the drought. The labour expectations from females are generally higher. The workload increases during drought—women and girls required to fetch water and firewood from further distances as nearby sources dry up and take care of increasing number of dependents are livelihood options diminish. In distress situations, the aspirational bar always first goes down for girls. This sentiment was clearly expressed by the female study participants. Girls’ education takes a big hit in this process. The findings of the report show that girls are pulled out of school to contribute in household chores and to care for siblings and other members and due to the increased safety and commute costs of high schools being located far away. The incidence of open defecation is high in the study area. This issue exacerbates during drought. Women face the absolute brunt of lack of toilets. Open defecation compromises their body systems and makes them vulnerable to urinary tract infections, kidney stones, issues in reproductive systems and even sexual exploitation. Another vulnerability that the respondent women face is that of belonging to their caste communities.

Some of the senior citizens and persons with disability receive their old age and disability pensions late or don’t receive at all. They also face challenges when their families migrate.

Vicious Cycle of Poverty

The study brings out the extreme financial vulnerability of the studied communities. The Dalits and the Adivasis live in kuccha houses (96%), do not own their homestead land (42%) or even the title of their house (30%). A majority do not have water connection (53%), electricity connection (51%) and toilets (60%). The onslaught of consistent droughts hampers agricultural potentiality. The reducing water level combined with compromised irrigation system reduces land fertility. This has a large impact as a majority of the people (75% of the respondents) are depended upon agriculture for their livelihood. The cropping cycles also get affected often leading to delayed harvest or even crop failures. The precariousness of their financial position leaves the farmers with little capital to invest for the new agricultural season. As a result, they are forced to take loans from local moneylenders and banks and non-banking institutions. As the study respondents revealed, the rate of interest of these loans range from 3% (from SHGs) to 10% (from moneylenders and banks) and even up to 12.5% (with arrears on bank crop loan). Even non-farmers—labourers and other groups—borrow money as a coping mechanism.

In fact, 50% of the respondents said that they experience high to very high level of indebtedness and 38% experienced a medium level of indebtedness. Thus, debt is a coping mechanism not only for cultivators but for most people just to survive in the drought ecosystem. 67% of the respondents reported difficulty in finding MGNREGS work. Therefore, it is not surprising that 65% of the respondents felt a high to very high reduction in household income. The respondent group lives on a meagre income of Rs. 40 per person per day. If we consider the average family size as ‘5,’ this amount goes down to Rs. 33. The World Bank very recently adjusted the international poverty line at $2.15 a day. This is approximately Rs. 170 per day. These marginal groups of Marathwada are living four times or 25% below the international poverty line.

ii. Drought and the Inner Worlds of People

The intangible effects of natural calamities do not often appear in discussion. Droughts are perceived mostly through their very visible physicality - aridity, brownness or a lack of greenery,
roughness or the distinct cracked quality of the soil and dustiness. All of these features relate to the singular cause of lack of water and wetness. Water, however, is not often correlated to the inner worlds of people. It is recently that studies have been paying attention to the psychological impact of natural calamities. Psychological stress coupled with disruption in social support systems and economic destabilisation cause noteworthy psychosocial impact. This study unveiled significant psychological effects of drought including depression, stress and tendency towards addiction. The study respondents even mentioned farmer suicides in their region. It should be noted that Marathwada has one of the highest numbers\(^\text{32}\) of farmer suicides. The senior citizens and PwD study participants expressed a sentiment of being a burden to their families. Children felt excluded in decisions regarding their schooling and other aspects. They were forced to drop out of schools to help their families.

A significant finding of the study is the conflicts and violence caused by droughts. Nearly half the respondents said that water-related conflicts rose significantly during droughts. The triggers of psychological stress and economic destabilisation can together cause a breakdown in family structure and further stress preexisting communal disharmony. New roles and power dynamics can emerge through negotiation and coercion. The study participants revealed an overall lack in faith towards authorities such the police and the gram panchayat. The marginal groups, thus, are unable to procure a recourse through service systems due to their dysfunctionality. The economic destabilisation not only causes internal pressure in the family but also strains access to external sources of comfort. For example, how can the women visit their relatives for moral support or for a physical reprieve from the environment of stress when the household is already cash-strapped? These factors lead to isolation of these already brutalised groups. The vicious circle of stressors, dependency and vulnerability and violence thus activates and continues.

iv. Drought and the Shrinking Response

As the phenomenon of drought expands, people shrink in response. The study found that the Dalits and the Adivasis make heavy compromises on their expenditure. A majority of the respondents compromised on one of the most basic needs of life—food. 55% had to make high to very high compromises while 40% had to make a medium level of compromises. Nearly half the respondents evidenced high to very high levels of health impact. Nearly 70% said that the overall health expenditure rises during drought. Debt is another coping strategy. Additionally, the respondents also save money and store harvest. 32% even reported selling livestock. Another coping mechanism is to reduce schooling expenses. The families pull their wards out of school and engage them in three ways: (i) contribute to household labour (chores, fetching resources and care of members), (ii) contribute to household income (get them employed as labourers) and (iii) reduce the number of dependents in household (marry them off). The respondents also make adjustments in their sanitation needs. To cope with severe water scarcity and lack of disposable income, a majority of the respondents engage in open defecation.

Migration is another significant coping mechanism. A quarter of the respondents migrate in search of livelihood options, and do so mostly with their families. A larger number of ST respondents (39%) migrate compared to SC respondents (9%). They mostly migrate for four to six months. They face several issues at the migration destination as well as at their home villages such as,

i. Unsteady accommodation and homelessness
ii. Inability to enrol children in schools
iii. Inability to access public health services, public toilets and the PDS
iv. Unstable employment and low wages

\(^{32}\) Deshpande (2022)
v. Evacuation, police harassment and false implication in theft cases

These findings reveal how with accelerating marginalisation, these groups are further shrinking in their existence. It is evident that these marginal groups are caught in the endless loop of the vicious poverty cycle and, with the mechanisms available to them, it is extremely difficult to break out of this loop.

iii. Drought and the Inadequacies of the State

The state has an overarching influence on the drought ecosystem. The preexisting vulnerabilities influence and the coping mechanisms attempt to soften the blow of the impact of drought. In addition to determining the preparedness and the mitigation of drought, the state machinery also influences how significant the vulnerabilities are and how robust the coping mechanisms are. In executing these functions, the state is faltering in various ways.

Gaps in Drought Management

The Department of Agriculture, Cooperation and Farmers’ Welfare (DAC&FW) had published a manual for drought management in 2009. This manual was revised in December 2016. The manual mandates two levels of drought triggers. The first trigger is set off based on rainfall-related indices. The state governments are obligated to investigate impact indicators related to agriculture, remote sensing, soil moisture and hydrology after the first trigger. Based on this investigation, the second trigger has to be set off. After the second trigger, the government has to undertake field level survey of crop damage. The drought and its intensity are declared based on this survey. The drought has to be declared by a deadline of October 30th in Kharif season and by March 31st in Rabi season. However, the study found that the drought is declared too late for the people to gain actual benefits from the mitigation measures. 93% of the respondents said that they did not benefit from the government drought mitigation measures.

Crop Insurance

The Pradhan Mantri Fasal Bima Yojana (PMFBY) allows a premium structure of 1.5% and 2% for Rabi and Kharif crops respectively. The balance premium is borne by the government. The scheme provides financial cover for farmers against losses suffered due to crop failures caused by natural calamities such as drought. The study found that the farmers who are insured are often unable to claim benefits of this scheme due to the complicated bureaucratic procedure involved in it.

Information Dissemination

The Drought Management Plan itself mentions a lack of awareness building initiatives. 88% of the study respondents reported a lack of awareness about drought mitigation measures—knowledge that such schemes exist and/or the procedures to avail benefits of such schemes. For example, 35% of the respondents who did not receive cattle loss compensation were unaware that such compensation even existed. Another 33% could not undergo the requisite procedures while 31% were left out as the compensation was not declared during the period of their cattle loss. 38% of respondents did not attend Gram Sabhas due to lack of information.

33 Government of India (2017, pg. 36)
**Water and Fodder**

40% of cattle owners had to make arrangements for fodder during drought by themselves. 60% received the same from fodder camps. While the dependency on public water sources is high, 72% of the respondents shared that they faced water inadequacy during drought. 45% of the respondents had to walk upwards of 250 metres, sometimes even more than one kilometre, to fetch water. There is a severe paucity of public wells and natural water bodies and a considerable lack of school water tanks. Even public water tanks cater to just around 30% of the respondents.

**Alternative Employment**

The MGNREGS is a stop-gap mechanism in drought. The Drought Management Plan 2017 highly recommends this mechanism. It says34, “the most important relief component during the drought period is the generation of employment” to address conditions of poverty. Additionally, the works undertaken in this scheme are directed to address drought—rainwater harvesting, reservoir building, reforestation and watershed development. However, three quarters of the respondents reported missing out on availing this alternative employment. 60% of the respondents were unaware about the availability of employment opportunity under the MGNREGS and 15% were unaware about the process to enroll in the scheme. Nearly 20% felt the wages in this scheme were too low while some found that had to wait too long to find employment under it.

**Gaps in Welfare Infrastructure**

Public infrastructure significantly affects the preexisting vulnerabilities and coping mechanisms of the people undergoing drought. The study found various lacunae in this aspect. 89% of the respondents were not enrolled in any health schemes such as MJPJAY, IGSMY or Ayushman Bharat. 60% did not receive satisfactory health services during drought. If the schemes such as PDS, ICDS, Aganwadi and ASHA services or Mid-day Meals had been robust, this region would not have faced issues of malnutrition. A significant percentage of the respondents are excluded from schemes and benefits due to lack of identity or other requisite documents.

**Gaps in Enlisting Participation in Governance Process**

The study found a lackadaisical attitude in the state machinery, especially at local levels, to involve people in the planning and governance processes. 68% of the respondents did not participate in Gram Sabhas. Their concerns were often not taken into consideration, they were not informed about the village development plans. This lackadaisical attitude coupled with information gap among the people excludes the latter from decision-making avenues. This effectively leads to further marginalisation of Dalits, Adivasis and intersectional groups. This phenomenon is a result of not just bureaucratic unwillingness but also a lack of political will, particularly at grassroots level.

The state machinery does not adequately recognise the exclusion experienced by Dalits and Adivasis—be it in the everyday governance or in the drought relief and management process. Therefore, it fails to reach the services to them, and indirectly contributes in their marginalisation.

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34 ibid. pg. 49
2. THINKING AHEAD

Dalits and Adivasis of Marathwada are leading a hazardous existence in the drought ecosystem. There need to be urgent and conscious efforts to not only rescue these marginal groups but also to resuscitate the rapidly demising ecology of this region. Some of the recommendations of the study are as below.

i. Facilitating Inclusion and Empowerment in Disaster Governance

The study emphatically brings out exclusion happening during drought management and day-to-day processes. The foremost recommendation it, therefore, makes is to address this exclusion through direct and bold actions.

1. Proactive measures to involve Dalits and Adivasis in Drought Management

The Gram Panchayat and other local bodies need to take a stronger cognisance of caste-based discrimination taking place in their areas. Dalits and Adivasis need to be equipped about their rights and entitlements, legislations to safeguard them and grievance redressal mechanisms to raise concerns and have them resolved in timebound manner. Consistent dialogue, sensitisation and proactive measures are required for the local representatives and bureaucrats to deepen their understanding of the structural reality of caste and vulnerability in drought management and climate change adaptation.

In the Drought Management Plan 2017 a reference to Dalits and Adivasis is made—“While the district administration must strive to provide employment to all the able-bodied adults, both men and women, and there cannot be any discrimination in the provision of relief, special attention needs to be focused on “below poverty line” families, landless labourers, Scheduled Caste and Scheduled Tribe households.” The Plan should be revised to include more details about the differential experience of Dalits and Adivasis. These instructions should specifically include steps to ensure equitable distribution of relief material and their engagement in the drought preparedness and management processes.

The National Disaster Management Act 2005 and its Rules should be revised to include clear instructions to curtail discrimination and catalyse better outreach towards these groups. There should be a provision to register grievances and complaints, and actions against the erring members of society and the officials.

35 ibid. pg. 51
2. Strengthening Political Participation

The Maharashtra state government should undertake special efforts to facilitate inclusion of Dalits and Adivasis in Gram Sabhas. Recurrent notices should be sent to Gram Sevaks, Sarpanches and other functionaries to ensure their participation. PRI training institutions such as YASHADA (Yashwantrao Chavan Academy of Development Administration) should undertake specialised training of concerned officials to strengthen knowledge and facilitation skills of the latter.

Civil society organisations and political parties play a significant role here. Media and research reports need to come out regularly to highlight incidents of exclusion, discrimination, community-based coping practices, and concerns to inform policy decisions, opinion makers and influencers, and the general public.

Drought management plans at gram panchayat, district and state levels should be developed in consultation with the whole community, with special efforts to explain the impacts and available mitigation, preparedness and relief measures to marginalised communities.

At budgetary level, Panchayats should be allocated more funds to cope with drought, while prioritise the special needs of vulnerable communities through existing financial allocations.

Community-based organisations of Dalits and Adivasis should be encouraged, educated and involved in the preparation of such plans at all levels of planning, implementation and monitoring through dedicated watchdog committees.

The inclusion of women, senior citizens, people with disability and migrants should be facilitated through similar efforts. SHGs should be capacitated in drought preparedness, state schemes and disaster risk reduction informed village and gram panchayat development planning and monitoring. Women SHGs can undertake various activities such as monitoring drought management measures and starting local businesses in addition to micro-finance. They can also represent other intersectional groups more effectively.

The local governance system should be expanded to include disaster and climate resilience standing committee with members from intersectional groups represented on the committee.

Maharashtra should initiate Bai Sabhas (child committees) at panchayat level to include the suppressed voices of children in the affairs of local governance.

ii. Pro-poor Agricultural Economy

Agriculture is at the centre of the drought ecosystem. Therefore, drought can be effectively addressed only through a holistic approach.

MGNREGS

This scheme is crucial resuscitating the drought economy. More funds should be allocated to the scheme during the drought, as was exhibited during the first wave of the COVID-19 pandemic. Monitoring should be strengthened to ensure utilisation of funds and creation of works for the drought-affected population. In the NREGS works, priority should be given to constructing drought mitigation structures such as check dams, percolation tanks, tanks, ponds, community walls and afforestation.

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Additionally, the sizeable proportion and role of sharecroppers in the agricultural economy must be recognised. Special packages must be devised to reduce their vulnerabilities and address their needs.

**Innovative Agricultural Techniques**

Afforestation is a quick and effective drought mitigation method. Kitchen gardens help in tackling drought and food insecurity, while strengthening the PDS system to ensure no eligible household is deprived for want of documentation and procedural challenges.

Many innovations have taken place in agriculture nationally with regard to multi-hazard resistant crops and cultivation techniques. The state should support the marginal and smallholder farmers in adopting modern methods of agriculture by giving subsidies and waivers.

The cultivators engaged in sharecropping and lease farming should be recognized and provided access to public credit and a range of schemes and assistance on par with landowning farmers in disasters.

**Information Dissemination**

Concerted efforts must be taken to invest in outreach campaigns to raise awareness about drought mitigation measures and the steps required to be undertaken by beneficiaries to avail these benefits in a mission mode.

**iii. Strengthening the Welfare and Wellbeing Systems**

The functioning and monitoring of the various arms of public services should be strengthened to continue at highest efficacies during drought to maintain a minimum standard of living. The ICDS includes nutritional support for infants and children up to six years of age. Similarly, there are mid-day meals at government schools for older children. These schemes ensure food security of children and households. Additionally, they keep the children engaged through schooling. In addition to these targeted schemes, there is the PDS for the households’ food security. Similarly, there are Anganwadi and ASHA services, which need to function optimally during crises.

The pensions of senior citizens and PwD should be delivered on timely basis, and possibly, at their homes. State-run, well-equipped old age homes and support in small scale low-effort entrepreneurial activities for the senior citizens in collaboration with civil society organisations with demonstrated expertise and track record would give them a new lease of life and restore the sense of self-worth and dignity.

Similar attention should be given to public health systems and services to create awareness and deliver quality healthcare, including psychosocial care in disasters. Anganwadi workers, ASHA workers, SHGs members should be trained in psychosocial care and counselling as first responders, with capacity to prescribe and facilitate timely referrals, when required.

The State should organize campaigns and raise awareness on domestic violence or gender-based violence with dedicated helplines to report such cases and legal recourse. The process should be facilitated at the Gram Panchayat level in the drought prone and affected regions in particular. In doing so, the state must consider the severely restricted digital access and mobility of women, and devise systems that can be accessed by them safely and easily.
The School Management Committees should be empowered to monitor dropout during drought and other calamities in the region and take proactive steps to support the children in need together with PRI leaders and school administration.

Migrants face several issues. Migrant identity documents should be institutionalised. Their inclusion in all schemes in originating villages should be ensured. Through coordination of home and destination regional departments, better living conditions of and state services for migrants should be undertaken. Schemes like One Nation One Ration Card and e-shram registration should be facilitated in a mission mode at the PRI level with state-level community-wise disaggregated database for targeted actions in the area of policy, programme and budgetary allocations.

Steps should be undertaken to ensure 100% possession of identity documents. People should also be equipped in creating scheme-related documents (insurance, animal ownership, etc.).

Develop and mainstream targeted schemes for building disaster and climate resilience for Dalits and Adivasis. The existing scheme databases should provide disaggregated information on SC/ST beneficiaries. This calls for adapting the existing programmes and adopting new programmes to address specific vulnerabilities, impacts and coping requirements. These should include alternative livelihood and income generation for men and women apart from MGNREGA; asset creation, and enhanced social protection among other measures. The state action plans for climate (and drought) resilient Maharashtra must lay focus on marginalised communities, and develop responsive programmes by engaging the communities, their leaders and organisations/CSOs consistently.
REFERENCES


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# Abbreviations

<table>
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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>CSO</td>
<td>Civil Society Organisation</td>
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<td>DRR</td>
<td>Disaster Risk Reduction</td>
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<td>ICDS</td>
<td>Integrated Child Development Services</td>
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<td>MGNREGS</td>
<td>Mahatma Gandhi National Rural Employment Guarantee Scheme</td>
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<td>PDS</td>
<td>Public Distribution System</td>
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<td>PwD</td>
<td>Person with Disability</td>
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Kuccha/Pucca: A house made from easily available raw ('kuccha') materials such as mud, cowdung, wood, stone, leaves and straw. As opposed to pucca (concrete) houses made from materials such as iron, steel, cement and bricks, kuccha houses are less durable and susceptible to elements of nature.

Homestead Land: The land containing the house and its adjoining area owned by the family.