THE VULNERABLE CHILD AND THE CLIMATE CRISIS

Why We Must Keep Children At The Center Of Climate Action

PROTECTING VULNERABLE CHILDREN Aangan

with foundational research support from The Bridgespan Group

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EXECUTIVE SUMMARY

India is extremely vulnerable to the devastating impacts of climate change and ranks **7th on the Global Climate Risk Index**. As the climate crisis worsens, India is predicted to face rapid changes in average temperatures and rainfall, increased frequency of droughts, and a subsequent surge in food insecurity, lost livelihoods and distress migration for its people. **Children, who constitute approximately 31%[1] of India's total population, bear a disproportionate burden of all climate disasters, with the most vulnerable children bearing the greatest burden**[2].

Climate shocks have a profound impact on vulnerable communities, especially in regions experiencing frequent or overlapping events, because they **worsen existing vulnerabilities and inequities,** reducing communities' ability to adapt. As a result, vulnerable families become trapped in a cycle of declining resilience, facing higher risks in future disasters.

1 UNICEF, The State of the World's Children 2023, which estimates India's total population (in thousands) 2021 as 1,407,564 and India's population under 18 (in thousands) 2021 as 438,164.

2 The Climate Crisis is a Child Rights Crisis, UNICEF, August 2021.

In response, they resort to **harmful coping mechanisms such as unsafe migration, sending their children to work, or marrying their daughters off early.** These actions **jeopardize children's basic rights, including their rights to health, nutrition, safety, and education**.

The growing risks to children due to climate change will **profoundly impact their future ability to contribute to the economy.** Our analysis reveals that India could face an **approximate 5.5% decline in GDP by 2047** if the climate impact on vulnerable children is left unaddressed. We estimate that **approximately 27 million children** who would be eligible to enter the workforce by 2047 would be unable to contribute meaningfully as they would be exposed to long-term vulnerabilities owing to the impact of increased climate disasters.

At present, funding levels for children in India are substantially lower than global benchmarks. We estimate that India needs to allocate an additional **2% of its GDP** to children's safety, well-being, education, health (physical and mental), nutrition and development to be comparable to its peers and global standards, and more importantly, to offset the potential loss of **5.5% to the GDP**. Should this 2% investment not be made today, the **overall economic loss of 5.5% could balloon to as high as 10-15% of the GDP by 2047.**

The current legislative framework for climate action is not equipped to deal with many emerging climate shocks such as heat waves and local flooding, is inadequate for regions facing multiple or recurring shocks, and also makes no specific provisions and financial allocations for children's safety and well-being.

An analysis of child and climate vulnerability data across different districts in India reveals that several regions bear a disproportionate burden of both vulnerabilities – climate and child. These areas, where children face the greatest risks, need to be prioritized for targeted interventions. A **place-based approach can help focus resources where they are most needed** and address the safety and well-being of children through tailored solutions grounded in local realities. An analysis of 324 districts[3], based on indicators such as child safety, health, nutrition, education, and institutional support, **found that 85 of the most vulnerable districts in India are mostly concentrated in six states:** Bihar, Maharashtra, Uttar Pradesh, Karnataka, Assam, and Rajasthan. Addressing the combined impact of climate change and child welfare issues in these vulnerable regions is crucial for promoting resilience and long-term development of children.

As child vulnerability is an issue that cuts across development programming and planning, it is essential that **government, philanthropy, industry, civil society organizations and communities integrate a child-centric lens** in all of their development strategies, priorities, and actions. Along with this, we recommend that key accountable parties in the ecosystem take, among others, the following necessary and urgent actions to help mitigate climate risks for vulnerable children:

1. *The Government should enact a comprehensive climate hazards policy, address key data gaps on children, and introduce child-centric provisions across policies to ensure children's safety, development and well-being before, during, and after occurrence of serious climate events.*
2. *Industry should conduct rigorous child-impact assessments across*

3 Bridgespan analysis based on a sample of 324 districts vulnerable to climate-related disasters as per CEEW's Climate Vulnerability Index.

operations, track supply chains to identify risks to children, and strengthen overall worker welfare including ensuring the payment of living wages and sufficient benefits to them.

3. *Funders should earmark **at least 5% of their funds** for child-centered climate action strategies, prioritize funding for districts that are high-risk for both climate and child vulnerability, and support locally led adaptation efforts.*

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Photographs used in this report come from multiple sources including Aangan archives and Adobe-stock. Very special thanks for their contributions to Ravi Walia, Venu Arora, and the team at FreeDem who brought together a group of young women who sent us photographs of how they wanted their communities represented.

The cover image captures the quiet strength and hope of a young girl – her eyes wide with innocence as she looks directly at the camera, and a gentle smile playing on her lips. She exudes a tender mix of courage, optimism, and joy – emotions that reflect the delicate balance of vulnerability and resilience that children embody. Her gaze is a silent reminder of the trust she places in us – to create a world that is safe, nurturing, and vibrant. This image stands as a call to action, urging us to take responsibility for ensuring a climate-secure world where every child, like her, can grow and thrive with dignity and joy.

Report Design by: Shashwata Nova

PREFACE

Atiya Bose
CEO, Aangan

"It's a desperate situation. There's water everywhere and people have lost everything."

My normally unflappable colleague Shaswati's voice shook as she described the ravaged countryside. It was 2020, and Cyclone Amphan had devastated the communities where we were working in West Bengal. Landing as it did in the middle of the Covid-19 pandemic, its impact was doubly catastrophic. As though that was not brutal enough, the very next year Cyclone Yaas tore through the region.

Later, when pandemic restrictions eased and we were finally allowed to travel and meet, Srabonti, who heads our work in West Bengal was emphatic, ***"There is no point working here if we don't acknowledge what is happening to children because of climate. People say they still haven't recovered from cyclone Aila which came in 2009, how do we imagine they will survive now?"***

The leadership team based in West Bengal were unanimous in their assessment – we have to start thinking about the impact of climate change on vulnerable children.

They were not wrong. Over the last two years we have spoken to more than 19,000 residents of the climate hazard prone Sundarbans region of West Bengal and heard their stories. Stories of loss and stories of courage – of people picking themselves up and rebuilding their lives, over and over again. Most gut wrenching has been hearing children speak of their mental anguish: ***"I have no dreams or hopes for my future,"*** a young person said.

Although the stories we know most intimately about what climate change is doing to ordinary people come from our work in West Bengal, our understanding is deepened by what we see elsewhere too. In Bihar, Jharkhand, Rajasthan and Odisha, once we start to take a climate lens, we can't stop seeing the connection between erratic, unexpected climatic conditions and the exacerbation of people's vulnerability, their marginalization, and then, inevitably, harm to their children. Not just in India, but across the world, it is poor children and their families – who have had no hand in creating the crisis – who are bearing the brunt of the climate catastrophe.

For over two decades, we at Aangan have been obsessed with children's rights, their protection and building systems to prevent child harm. We are certain that the key question now, for everyone, everywhere is this: ***How can we protect vulnerable children from the impacts of climate change?***

This report is dedicated to the children and young people we meet, who show us grace, courage (and a fair bit of sassiness), and help us keep hope alive, with our gratitude, and a promise that we will do better by them.

1

INTRODUCTION

THE TIME TO ACT IS

NOW!

Climate disasters are not a distant threat, but an immediate and recurrent global emergency. The loss to human life from these events runs into hundreds of thousands across the world. For survivors, the impact is no less devastating – the most fragile amongst those being children, susceptible as they are to exploitation and abuse due to their compounded vulnerabilities[4]. According to the International Labour Organization, around **70 million children are impacted by climate disasters globally every year**[5]. Losses incurred during disasters frequently push marginalized populations to adopt coping mechanisms that are dangerous for themselves, and worse for their children – unsafe migration, dropping out of school, early marriage, child labour, which, along with the impact of the disaster itself, profoundly impacts a child's life, exposing her to a plethora of immediate and long-term risks. The United Nations Environment Program estimates that globally, human trafficking rises by 20-30% during a disaster due to lost livelihoods and disrupted families[6]. In

4 Literature Review - Trafficking in Humanitarian Emergencies, USAID, 2006

5 Prevent child labour, protect children in conflict and disaster, International Labour Organization, 2017

6 Women at the Frontline of Climate Change, Gender Risks and Hopes, UN Environment Program, 2021 and How disasters, poverty fuel human trafficking, Down To Earth, 2021.

places where the frequency of disasters is high, the cycle of risks perpetuates.

In India, it is estimated that 24 million children are impacted by cyclones, floods, heatwaves, and other climate-related emergencies every year[7]. A 2023 study conducted by Aangan in the climate hazard districts of North and South 24 Parganas in West Bengal shows that child harms such as child labour and child marriage have exacerbated due to the worsening effect of climate disasters on livelihoods and financial vulnerability. The survey found that 16% of the adult respondents had to either arrange a marriage for their child, send their child to work, or pull their child out of school in order to cope with the financial impact of climate disasters. This response rose to 20% among more vulnerable groups. Worse, 15-23% of adolescent respondents said that they themselves had faced the pressure of child marriage or child labour and 65-75% claimed to know someone close who was affected by it.

Despite the widespread acknowledgement of loss and increased vulnerability, at present, both in India and globally, climate action focuses primarily on climate mitigation with a view to protecting future generations. Even as we rush to save the planet for tomorrow's child, the plight of today's child, especially the most vulnerable ones who will experience a significant intensification of climate disasters, remains largely invisible. The increase in frequency, intensity and overlap of climate disasters, coupled with the long sunset period for mitigation commitments to take effect, makes it imperative for all of us to **simultaneously focus our efforts on safeguarding and building the long-term adaptive capabilities of today's vulnerable child and her family.**

In India, climate change and child rights are also siloed as separate focus areas for policymakers, civil society organizations, philanthropic and corporate funders, and interventions and actions by these parties tend to ignore their intersectionality. Moreover, children are mostly seen as a subset of family and hardly ever recognized as citizens and affected persons in their own right, with specific

7 Humanitarian Action for Children, India, UNICEF, 2023

needs and entitlements.

This report aims to draw attention to the critical issue of the impact climate change has on vulnerable children. In this report, the reader will find stories (primarily from West Bengal) and data from all over India, demonstrating how **climate disasters and shocks disproportionately impact vulnerable families**, and in the absence of long-term institutional support, often force them to adopt dangerous survival strategies to make ends meet. The report further provides an insight into the **magnitude and complexity of the vulnerable child-climate problem, including the extent of potential economic loss** that may occur if immediate action is not undertaken by relevant parties. Although it does provide a broad set of recommendations for the way forward, its main aim is to bring vulnerable children to the forefront of sub-national, national, and global climate action.

This report has looked at widely available research, both global and Indian, and covers insights from thought leaders and partners in the ecosystem. However it should be

read in light of the following limitations, in addition to those set out in the annexure to this report:

1. *There is a **lack of contemporary (the last census was in 2011) data** on many important aspects of child vulnerability, especially for children in the 14-18 years age group who are excluded under key legislations (Right to Education and Prohibition of Child Labour). The children of the poor, regardless of their age, are almost always **working children** – whether it is legally sanctioned work in family enterprises or the burden of household chores or child labour, and the **existing data does not adequately capture this vulnerable population.***

2. *Trafficked children, missing children, street children, children affected by forced displacement, children of migrants or who are themselves migrants, child-headed households, children not attending school or attending irregularly, and children subject to exploitation, violence, and abuse, are all categories of vulnerable children who will be severely affected by climate disasters and shocks, but for whom data is scarce.*

3. *There are also gaps in **sub-national and district-level data** for child vulnerabilities which is particularly challenging for a district-wise analysis.*

Children living precarious lives in marginalized families and communities and in high climate vulnerability districts deserve more focused attention and investment. To understand the particulars of their situation, we must broaden our understanding of child vulnerabilities and their relationship to precarity as a basis for more effective policies and interventions that solve for children's needs.

Vulnerable children will have no future if they aren't safe and protected today. We hope that this report sparks the beginning of a deeper conversation on the climate

crisis in India and its impact on vulnerable children and informs decision-making for child-centered climate planning both for today and for the future. The time to act is NOW. If we fail to act, climate change will continue to ravage the lives of the most vulnerable children, leaving them with neither hope nor a future.

2

TWIN CHALLENGES AT SCALE

CLIMATE RISK AND

SAFEGUARDING CHILDREN

1. Global Climate Risk Index and Children's Climate Risk Index: Where We Stand

India, with its vast and varied geography, is extremely vulnerable to the devastating impacts of climate change. **India ranks 7th on the Global Climate Risk Index**, which analyzes and ranks countries based on the extent to which they are affected by the impacts of weather-related loss events (storms, floods, heat waves etc.)[8].

Rank	Country	Rank	Country
1	Mozambique	6	Afghanistan
2	Zimbabwe	7	**India**
3	The Bahamas	13	Bangladesh
4	Japan	27	Brazil
5	Malawi	32	China

8 Global Climate Risk Index 2021 by Germanwatch.

It is well established that vulnerable populations – such as children – bear the brunt of a country's climate risk. With an already large population of vulnerable children, unsurprisingly, **India also ranks 26th on the Children's Climate Risk Index (CCRI)**[9], which analyzes and ranks countries based on children's exposure to climate and environmental shocks and stresses[10], and their vulnerability[11] to those shocks.

At present, it is estimated that **every year 24 million children** are impacted by cyclones, floods, heatwaves, and other emergencies in India[12]. Estimates suggest that **by 2030, extreme heat alone will affect ~225 million children in India**[13]. These children will be forced outside the 'human climate niche' — the temperature range in which humans have thrived for ages — leading to increased morbidity, mortality, infectious disease, displacement and food insecurity, thus putting their very survival at risk.

2. The Geographic Extent of Climate Vulnerability

27 of 35 States and Union Territories in India are highly vulnerable to hydro-met disasters and their compounded impact. At a district level, a staggering **75% of districts in India** (including **95% of coastal districts**) are considered to be extreme climate event hotspots, with **more than 80% of India's population** living in districts that are highly vulnerable to extreme hydro-met disasters[14].

9 The Climate Crisis is a Child Rights Crisis, UNICEF, 2021 and Children's Climate Risk Index 2023 by UNICEF

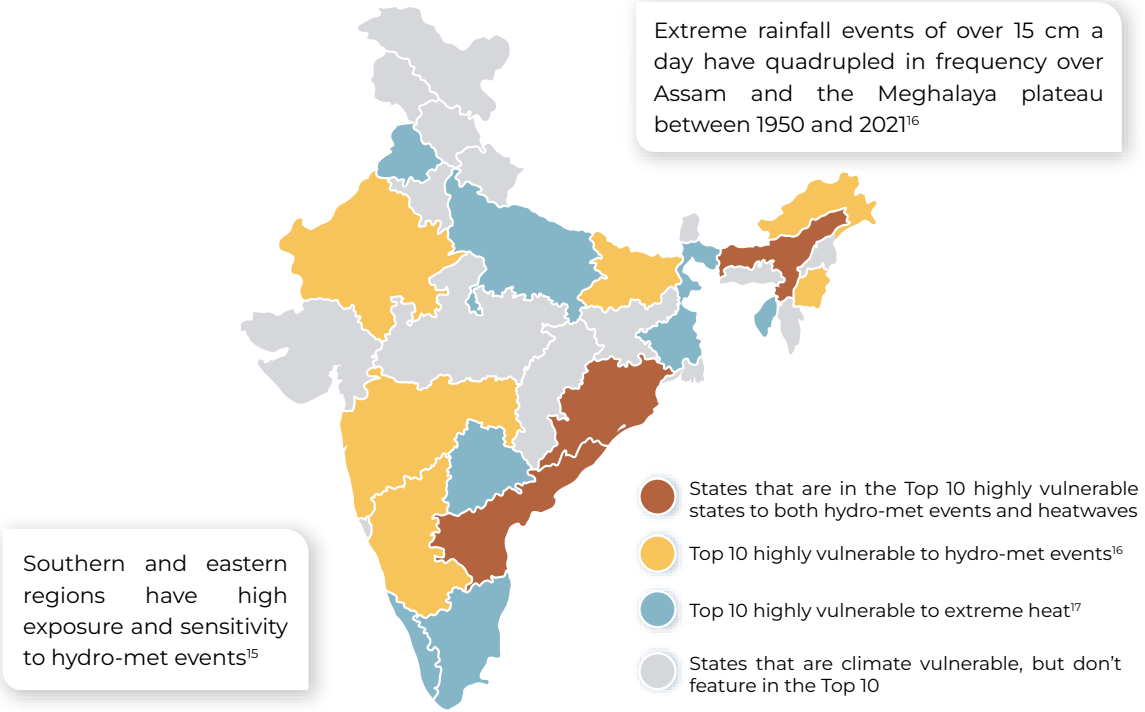
10 Namely water scarcity, riverine floods, coastal floods, tropical cyclones, vector borne diseases, heatwaves, air pollution, soil and water pollution.

11 CCRI determines children's vulnerability based on a country's metrics on child health and nutrition, education, water, sanitation and hygiene (WASH), poverty, communication assets, and social protection.

12 Humanitarian Action for Children, India, UNICEF, 2023; The number of children impacted annually is de rived from a 10-year average of the number of disaster-impacted children.

13 Global heating to put 600 million Indians at greatest future risk, Down To Earth, 2023; Quantifying the human cost of global warming, Nature Sustainability, 2023 and Bridgespan analysis based on study indicating a total of 600 million people impacted.

14 Climate Vulnerability Index 2021 by CEEW; Hydro-met events include floods, droughts, and cyclones.



Vulnerable populations[18] living in these high climate vulnerability zones in India are highly susceptible to the wide-ranging impacts of climate disasters including death, loss of livelihoods and property, loss of care and protection systems for children and the elderly, destruction of basic infrastructure, food insecurity,

15 Climate Vulnerability Index 2021, by CEEW; Hydro-met events include floods, droughts and cyclones.

16 Climate Vulnerability Index 2021, by CEEW; Hydro-met events include floods, droughts and cyclones.

17 Heat Index by University of Cambridge

18 Those who, among other things, possess limited financial resources and abilities to adapt and who are frequently excluded from social safety nets.

Smarinita Shetty
CEO and Co-Founder, India Development Review

Economic distress and the resulting migration leads to vulnerability. The climate crisis increases families' and hence their children's vulnerabilities. However, not many people talk about children when it comes to migration, climate and water insecurity. The conversation is almost always centered around the family as one cohesive unit, without realizing the distinct and particular impact on the child in the family.

homelessness, spread of vector borne diseases, and migration.

3. Child Vulnerability

Children, who constitute a staggering ~31%[19] of India's total population, bear a disproportionate burden of all climate disasters, with the most vulnerable children bearing the greatest burden[20].

There are many factors that determine and exacerbate child vulnerability including (1) gender, (2) being a child bride, (3) disability, (4) caste, (5) poverty, (6) access to healthcare and nutrition, (7) access to water, sanitation, hygiene (WASH) and other services essential for survival, (8) access to institutional support, (9) presence of an adult caregiver, (10) out of school status, (11) being a working child, (12) being a migrant or affected by

19 The State of the World's Children 2023 by UNICEF, which estimates India's total population (in thousands) 2021 as 1,407,564 and India's population under 18 (in thousands) 2021 as 438,164.

20 The Climate Crisis is a Child Rights Crisis, UNICEF, August 2021.

family migration, (13) being orphaned, (14) family ownership of land/ assets, (15) being homeless or living on the streets, and (16) being a missing or trafficked child.

A child may be considered vulnerable in the context of a climate disaster, if there is a high probability that, relative to other children in the population, the climate disaster will cause a negative outcome for the child (such as malnutrition, loss of caregivers, being taken out of school and put to work, or married off etc.). Children in the same family / economic position may also suffer different degrees of vulnerability on account of other factors such as their caste and societal norms, among others. According to estimates from the last census (2011), **40%** of India's children are vulnerable and live in difficult circumstances, though the current figures are likely to be much higher[21]. **Currently, 85 million children are migrants[22], ~50 million children are estimated to be working[23] (vs ~10 million children engaged in child labour[24]), 1.5 million become child brides each year[25], 49 million children live in multidimensional poverty[26], 37 million belong to scheduled tribes[27], 7.2 million are from scheduled castes[28], 30 million children are orphaned/ abandoned[29], 15**

21 Information Kit on Children in Need of Care & Protection, Issues, Programmes & Services, NIPCCD, 2021

22 Bridgespan analysis based on A Case for Functional Social Protection Portability to Address Vulnerabilities of Migration-affected Children, EPW, 2022

23 Bridgespan analysis based on India National Multidimensional Poverty Index 2023 by NITI Aayog and FACT SHEET: Child labour in India, International Labour Organization, 2017.

24 Child labour rises to 160 million – first increase in two decades, UNICEF, 2021.

25 Ending child marriage and adolescent empowerment, UNICEF, 2023

26 India National Multidimensional Poverty Index 2023 by NITI Aayog

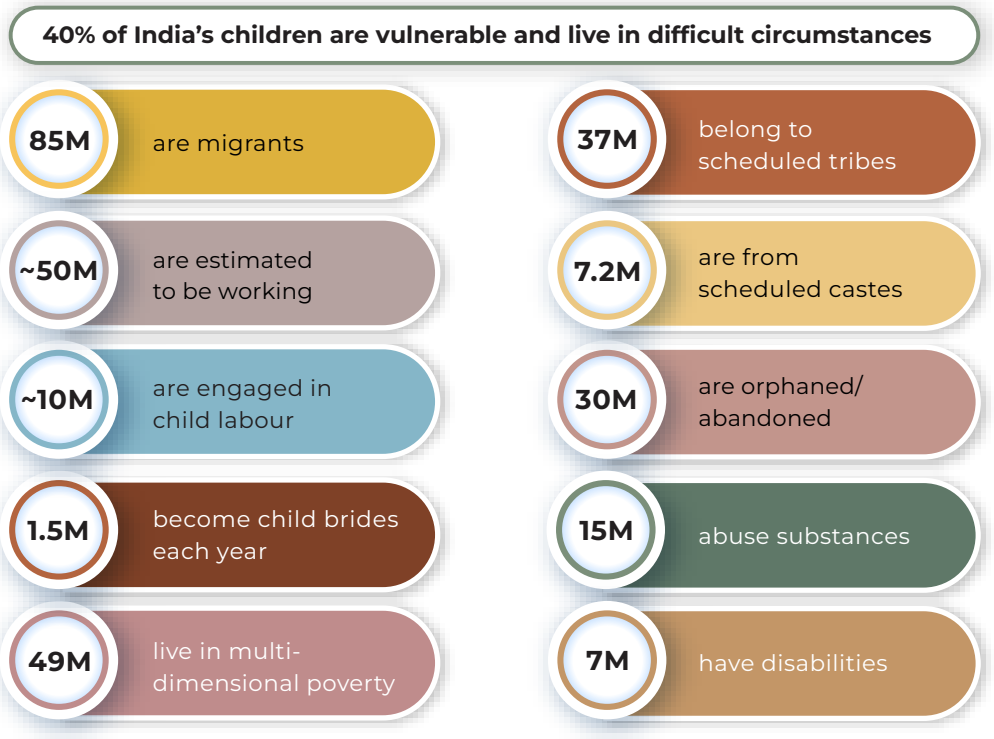
27 Bridgespan analysis based on India to overtake China as world's most populous country in April 2023, United Nations projects, United Nations, 2023; How many children are there in India?: UNICEF, 2023; World Bank Data, 2023, and Census of India 2011 (SC and ST) data.

28 Bridgespan analysis based on India to overtake China as world's most populous country in April 2023, United Nations projects, United Nations, 2023; How many children are there in India?: UNICEF, 2023; World Bank Data, 2023, and Census of India 2011 (SC and ST) data.

29 Orphaned Children and Childcare Institutions, EPW, 2022.

million children abuse substances[30], and 7 million children have disabilities[31].

Climate disasters act as a threat multiplier for all these vulnerable children who already face systemic inequalities.



30 1.5 crore kids into substance abuse, govt informs Supreme Court, Times of India, 2022

31 N for nose, state of the education report for India 2019, UNESCO, 2019

Data Shows,

EXAMPLE 1

80%

of those displaced by climate disasters are **female**[32]. In the aftermath of a disaster, girls are also more likely to be pulled out of schools and burdened with domestic work, forced into child marriage, deprived of nutritious food (when resources are scarce) or suffer violence and exploitation, to enable their families to cope[33].

EXAMPLE 2

3.4X

higher distress migration reported amongst **scheduled castes**[34] in Jharkhand to mitigate drought-induced economic hardships

32 Climate Change's greatest victims are women and girls, UNICEF, 2023

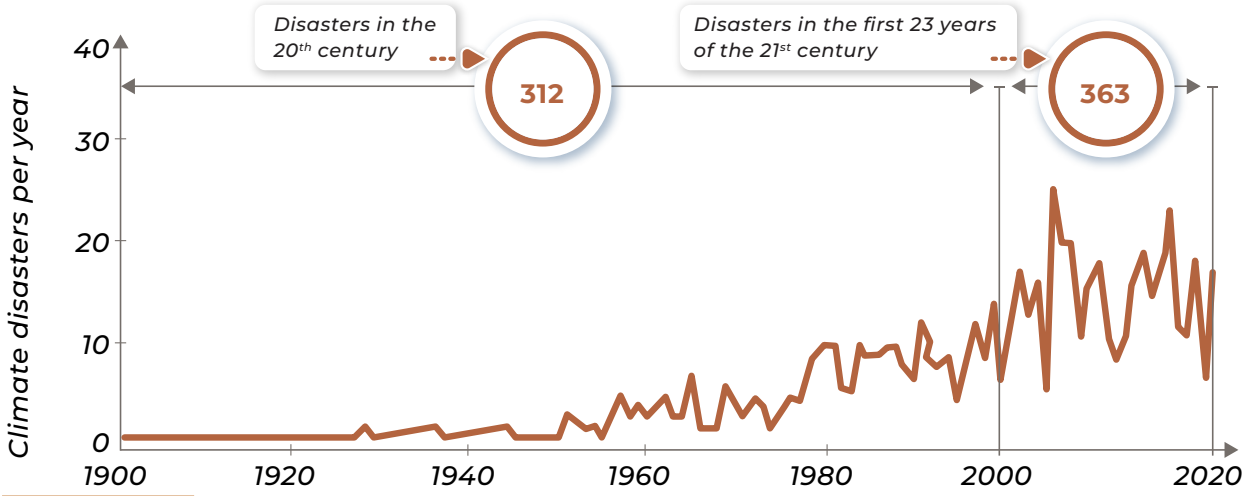
33 Climate Change, Impact on Adolescent Girls, UNICEF and Karama, 2023.

34 Caste, unemployment and loss of property raise likelihood of migration in areas of India hit by climate change, International Institute for Environment and Development, 2022.

4. Increased Frequency and Intensity of Climate Disasters

Data shows that India has recorded **363 climate disasters in just the first two decades of the 21st century**, compared to a total of 312 climate disasters in the previous century. Thus, the country has witnessed an alarming almost **5x increase** in frequency of climate disasters (like floods, droughts, storms, heatwaves, etc.) in the past 2 decades[35].

> *It is very frightening when the sirens go off to tell us about the storm coming. I start to sweat. I am scared that I will have to leave my school, family and friends and go to live somewhere else.*
>
> Adolescent Girl
> **(12 years), West Bengal**



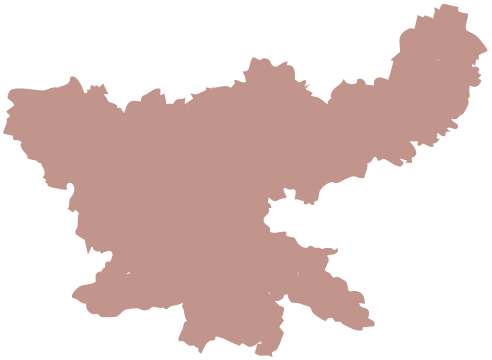
35 Based on the international disaster database from EM-DAT.

EXAMPLE 1

Uttarakhand has already faced multiple floods since 2000, primarily driven by heavy rainfall and glacier breaks. Rising temperatures have increased the risk of glacial lake bursts akin to the ones that devastated the Kedarnath valley in 2013 and parts of Chamoli in 2021[36]. Floods in 2013 killed **more than 4,000 people**, stranded around 100,000 people and caused massive destruction of roads, houses and bridges[37]. Floods in 2021 resulted in **massive infrastructural and economic losses** amounting up to ~INR 1,625 crore[38].

EXAMPLE 2

Jharkhand has seen 15 droughts since the year 2000, when it became an independent state. Continuous droughts have not only impacted the production of paddy, a key crop for farmers in the state, but have also resulted in numerous villages being



36 Why Uttarakhand govt wants to evaluate the risk of Glacial Lake Outburst Floods, Indian Express, 2024.

37 India Disaster Report, National Institute of Disaster Management, 2013.

38 By Dismissing Petition on Chamoli Floods, Uttarakhand HC Ignored Environmental Concerns, The Wire, 2021.

emptied out with entire populations migrating in search of employment[39]. Migration exposes children to several safety and well-being risks highlighted in the next section of this report.

EXAMPLE 3

Assam has recently started facing rising temperatures and heatwaves along with increased rainfall in the summer months. In May 2024, Assam recorded one of its highest temperatures since 1960, just days before receiving heavy rainfall due to cyclone Remal. **In fact, Assam has seen at least one disaster every year in the last decade** (including droughts, floods, landslides, and storms)[40]. ~64 lakh households in the state have to bear the brunt of these climate shocks, which directly impact their ability to protect their children[41].

39 Is Drought Becoming Synonymous With Jharkhand?, Outlook India, 2024.

40 Based on the international disaster database from EM-DAT.

41 State Profile of Assam by Government of Assam, Directorate of Economics and Statistics.

5. Projections Point to a Grim Future

Temperatures in India are projected to rise **by 1.5 - 2 degrees Celsius by 2030**[42], which is expected to further increase the frequency of climate disasters. This may lead to (a) **1.5 – 1.7x** increase in events of **heavy precipitation** over land[43]; (b) **2 – 2.4x** increase in instances of agricultural and ecological **droughts** in drying regions[44]; and (c) **4.1 - 5.6x** increase in **hot temperature** extremes over land[45]. In addition, India could witness:

i. Migration of **~45 million people** by 2050 due to climate disasters[46]

ii. **16% drop in food production and 23% increase** in the number of those at **risk of hunger** by 2030 due to climate change[47]

iii. A **cumulative total expenditure of INR ~85.6 lakh crore** (at 2011-12 prices) for adapting to climate change by the year 2030[48]

iv. **Up to 4.5% of the GDP** being at risk by 2030 due to lost labour hours from extreme heat and humidity[49]

v. 34 million of the projected 80 million global job losses from heat stress associated

42 Assessing the Costs of Climate Change and Adaptation in South Asia, Asian Development Bank, 2014 and In a year marked by extreme weather events, India diluted environmental norms and pushed coal, Scroll, 2020.

43 Summary for Policymakers, IPCC Sixth Assessment Report, Working Group I, 2021

44 Summary for Policymakers, IPCC Sixth Assessment Report, Working Group I, 2021

45 Summary for Policymakers, IPCC Sixth Assessment Report, Working Group I, 2021

46 Costs of Climate Inaction, Displacement and Distress Migration, Climate Action Network South Asia and Action Aid, 2020 and India, Migration from climate change getting worse, DW, 2023

47 Food production to dip, hunger to rise in India due to climate change, says report, The Hindu, 2022 and 2022 Global food policy report, Climate change and food systems, International Food Policy Research Institute, 2022

48 Report on Currency and Finance 2022-23, Reserve Bank of India, 2023

49 Report on Currency and Finance 2022-23, Reserve Bank of India, 2023 and Climate Investment Opportunities in India's Cooling Sector, World Bank, 2022.

productivity decline by 2030[50].

6. What Makes a Disaster

The current legislative framework for disasters in India[51] is insufficient to provide relief and succour to climate affected families and communities in the event of climate events and shocks that do not qualify as "disasters"[52], that is, climate events that do not meet a certain magnitude of catastrophe and destruction as stipulated under the existing legislative framework for disasters. Therefore, while heat waves, excessive local rainfall and flooding cause great suffering, loss of livelihood (especially to daily wage earners) and exacerbate existing vulnerabilities, they do not necessarily meet the legal definition (magnitude) of disaster and therefore, do not trigger adequate state responses, rehabilitation measures and support for affected children and their families. Over time, as the coping ability of these families and communities gets more depleted, a routine climate event or shock is enough to devastate them. However, state response mechanisms are not geared to these emerging climate realities.

> *Many cyclones and floods have hit our region in the last 10 years and we have tried our best to cope. We live close to the embankment, and now, even a day of heavy rain or a strong gust of wind causes the embankment to overflow and destroy our crops and home.*
>
> Adolescent Girl
> **North 24 Parganas, West Bengal**

50 Report on Currency and Finance 2022-23, Reserve Bank of India, 2023 and Working on a warmer planet - the impact of heat stress on labour productivity and decent work, International Labour Organization, 2019.

51 This includes the Disaster Management Act, 2005, as amended (DMA) and the Disaster Risk Reduction framework thereunder.

52 As understood under the Disaster Management Act, 2005, as amended.

State responses are also inadequate in areas of recurring climate events or shocks, where communities are caught in a perennial cycle of response, recovery, rehabilitation and rebuilding. In such a situation, it becomes difficult to determine when state support begins and when it ends. Further, the current legislative frameworks cannot comprehend loss or damage that is not material – loss of identity, culture, family, heritage, social connection, care provisions – all of which are very real, intangible losses that people face and that add tremendously to their vulnerability.

Most importantly, policies, programs and financial allocations do not have specific child-centric provisions nor are local nodal authorities accountable for child safety and well-being. Children are thus rendered invisible to and by the State, except as a sub-set of a family, making them doubly vulnerable.

PATNA, BIHAR

THE STORY OF A SUMMER

It is 2 pm in Punpun Block in Patna, Bihar. A heat wave has been declared. Schools are shut and people have been advised to stay indoors as much as possible. Outside, the sun beats down on the tin-roofed houses, heat rays scorch the earth and bounce back into the shimmering air. Across the basti, children are falling sick. In the news there are stories of people dying.

Inside, there is little respite. Gita Devi's daughters (aged 15 and 11) are restless. The still hot air in their 2-room dwelling is suffocating. Tempted though she is, Gita Devi forbids them from going out. She cannot risk them falling sick. Suresh – her vegetable seller husband – is hardly earning any money these days. The scorching heat spoils his vegetables and customers are few and far between. He has been forced to take a loan from the local moneylender to make ends meet. The blistering heat, lack of money and the mounting interest from the loan have created a situation of unbearable stress in their little home.
Gita Devi tries to keep the children quiet while Suresh sleeps. He is so quick to anger these days that his words and fists don't even spare the children. Gita Devi hates that her children have

witnessed his violence and are now scared of their once loving father.

Life feels bleak to Gita Devi. The hot summer will be followed by heavy rain that will cause the Punpun river to overflow. Like the last few years, the basti residents will be moved to a school for a few weeks till the water recedes, after which they will once again be left alone to re-build their homes and lives with next to no support.

With their source of income becoming increasingly unpredictable, Suresh has started talking about going to Delhi to work in a construction crew. Gita Devi doesn't want him to go alone, she doesn't want her family to be torn apart. "Building sites are not for women and children" he says tersely. Then yesterday, he said the words that she's been dreading the most: "an offer has come for Pinky, we will get her married before I leave, it will be easier for you to manage with just one of them". He averted his eyes – but not before she saw the sadness in them.

Gita Devi feels her heart breaking as she knows the decision to marry their underage daughter will rob her of an education and a future, but like Suresh, she too cannot see any way out of this vicious cycle that the family has been trapped in for the last few years.

A myriad of crises falls upon Gita and families like hers, one leading to another, eventually spiraling into a state of despair.

3

FALLING OFF THE EDGE

HOW CLIMATE DISASTERS IMPACT

VULNERABLE CHILDREN

Vulnerability is one of the defining components of disaster risk.

- United Nations Office of Disaster Risk Reduction

It is the human dimension of disasters and is the result of the range of economic, social, cultural, institutional, political, and psychological factors that shape people's lives and the environment that they live

in.

Despite some divergence over the meaning of vulnerability, most experts agree that understanding vulnerability requires more than analysing the direct impacts of a hazard. Vulnerability also concerns the wider environmental and social conditions that limit people and communities to cope with the impact of hazards.

Vulnerability is not simply about poverty, but extensive research over the past 30 years has revealed that it is generally the poor who tend to suffer worst from disasters. Poverty is both a driver and consequence of disaster risk (particularly in countries with weak risk governance) because economic pressures force people to live in unsafe locations and conditions. Poverty and the other multi-dimensional factors and drivers that create vulnerability mean that susceptibility to the impacts of hazards is often, but not always, associated with certain groups, including women, children, the elderly, the disabled, migrants and displaced populations, amongst others.

Every year millions of children in India bear the brunt of some climate disaster or the other, be it floods, cyclones or heatwaves.

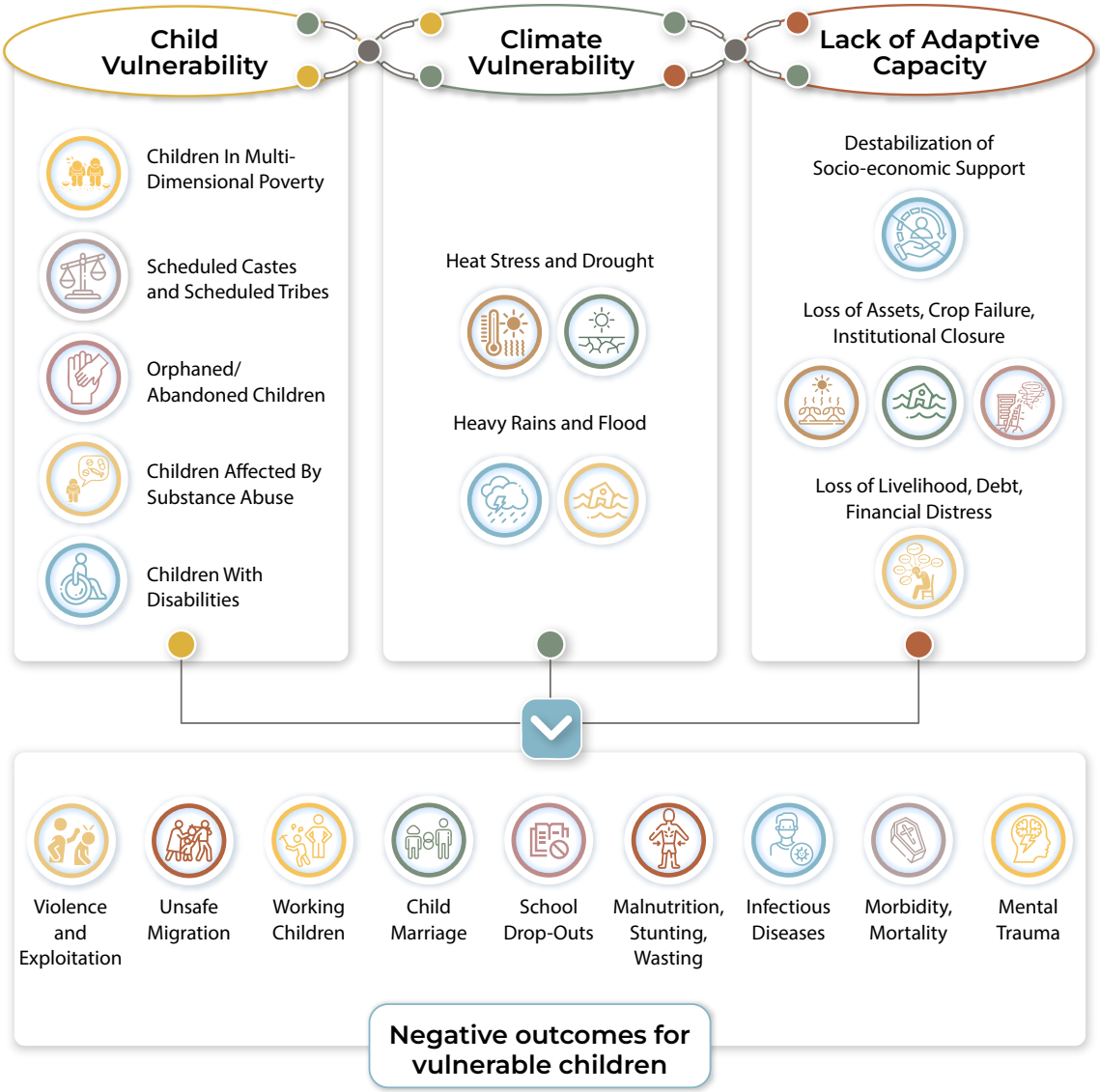
While no child is immune to the impacts of climate disasters, they do not impact everyone equally. What does that mean?

1. Lack of Adaptive Capacities

Adaptive capacity is the potential or ability of a system or community to adapt to the effects or impacts of climate change[53]. In regions that experience recurring or multiple climate disasters within short intervals of each other, not only is the **adaptive capacity of vulnerable communities eroded**, but the existing vulnerabilities and inequities they face are exacerbated by creating a vicious cycle where they become less and less likely to rehabilitate, rebuild and recover quickly and face an even greater risk in subsequent disasters.

Children predominantly depend on their parents/ caregivers for their survival and development. Climate disasters destabilize children's care, protection and socioeconomic support systems by up-ending family structures that then have an immediate and long-term impact on their health, education, nutrition, overall development and safety. **Vulnerable families, who lack adaptive capacity and who are grappling with multiple stressors including (a) poverty, (b) debts, (c) disease, (d) landlessness, (e) death, (f) loss of livelihood, crops, property and assets, (g) lack of access to banking and formal credit, (h) lack of access to WASH, nutritional and basic social services**, resort to certain maladaptive coping mechanisms in the aftermath of a climate disaster as a means to make ends meet - all of which are detrimental for their children.

53 Impacts, Adaptation, and Vulnerability, IPCC Third Assessment Report, Working Group II, 2001


Child Vulnerability
Children In Multi-Dimensional Poverty
Scheduled Castes and Scheduled Tribes
Orphaned/ Abandoned Children
Children Affected By Substance Abuse
Children With Disabilities
Climate Vulnerability
Heat Stress and Drought
Heavy Rains and Flood
Lack of Adaptive Capacity
Destabilization of Socio-economic Support
Loss of Assets, Crop Failure, Institutional Closure
Loss of Livelihood, Debt, Financial Distress
Violence and Exploitation
Unsafe Migration
Working Children
Child Marriage
School Drop-Outs
Malnutrition, Stunting, Wasting
Infectious Diseases
Morbidity, Mortality
Mental Trauma
Negative outcomes for vulnerable children

2. Climate Disasters and Maladaptive Coping

i. Unsafe Migration

To cope with the losses incurred due to climate disasters, large swathes of the population have had to turn to migration as an adaptive strategy. Data estimates that there are around **287 million adult migrants and 85 million migrant children in India today**[54].

> *Fisheries have replaced agriculture in regions impacted by floods and cyclones. Agricultural land would create employment for at least 10 people, but a fishery needs only 1 person. Land owners themselves contract out the fishery operations in return for a very small share of the profits. As a result, both land owners and farm workers have migrated to other states in search of work.*
>
> Young woman
> **North 24 Parganas, West Bengal**

54 Bridgespan analysis based on A Case for Functional Social Protection Portability to Address Vulnerabilities of Migration-affected Children, EPW, 2022.

Migration takes multiple forms, meaning, families don't necessarily all move together as a unit. Children may be left behind with little to no adult supervision, may migrate themselves, or different members may be forced to migrate separately, or may move together and face the vagaries of the new locations as a unit. In each instance, children face survival risks such as threats to health, and nutrition, in addition to issues of being pulled out of school, being put into work and being susceptible to violence, abuse and exploitation.

> *My parents migrated and left me to look after my old grandparents and my younger sibling. I have no one to guide me and feel so lost and confused.*
>
> Adolescent Girl
>
> **North 24 Parganas, West**

Many migrants face dual distress as their new destinations are often also threatened by climate risks, forcing them to migrate cyclically.

Ashif Shaikh

Founder, Migrants Resilience Collaborative

> *Since the last few years, the Delhi government has been pausing construction work for a few months every year due to deterioration in air quality. Because of this, migrants coming to Delhi are again forced to move in search of income opportunities. Besides, rising heat also forced some construction workers to go back to their hometowns. With the growing climate vulnerability of each state, migrants are forced to move 3-4 times a year in search*

of work. This has a significant impact on migrant children who not only lose their access to education, sustained nutrition and healthcare, but also suffer daily risks to their safety and well-being.

Unsafe migration, in essence, destroys the entire fabric of a family unit, disrupts community bonds and robs vulnerable children of any hope of leading a normal life.

Shagun Sabarwal
Regional Director
(Asia), Co-Impact

It took us the COVID crisis to realize that migrants at every level have odds stacked against them when they are not in their hometown. In a way, if we never have to face the same situation with respect to climate, we need to make the tweaks to the system now. We should not miss this opportunity to bring children's perspective given we are at the point of redesigning policies from a climate lens.

ii. Working Children

Economic and market failures, including employment in informal economies, debt-ridden families with limited or no access to banking and formal credit, skill and wage disparities and the absence of property rights leave families and children exposed to risks at the best of times. It is estimated that a **1% point increase in poverty leads to a 0.7% point increase in child labour**[55].

Child safety issues in Sundarbans, a region highly prone to cyclones and flooding[56]

Research in North and South 24 Parganas (West Bengal) shows that economic pressures have pushed children (especially boys) to join the labour force. **23% households with children aged 13-17 years have put their children to work.** Discussions with these working boys reveals that although they once aspired to pursue higher education and get better employment opportunities, they now feel it is not viable because of their family's economic situation.

55 COVID-19 and Child Labour, A time of crisis, a time to act, UNICEF and International Labour Organization, 2020

56 Impacts of Climate Change on Health, Migration and Child Protection in the Sundarbans region in India, Making interventions in Health, Migration, and Child Protection in Sundarbans more Climate responsive, Sreenita Mondal et al, 2022

As vulnerability increases, families all too often have to pull their children out of school and send them into informal work (including in hazardous work environments) to supplement lost family income and to make ends meet. The problem of working children (including what is technically termed as child labour) is made worse by:

1. *policy exceptions in child labour laws that allow 14 to 18-year-olds to work in non-hazardous industries and permit all children, including those under 14 to work in family enterprises*[57],
2. *the lack of enforcement of child labour laws; and*
3. *the failure of industries and businesses to institute robust mechanisms to audit and detect working children in their supply chain.*

It is estimated that the number of working children in India aged 5 to 18 (including those in family enterprises) could be as high as **50 million**[58] with **13 million** children being out-of-school[59].

> *I was 13 when cyclone Amphan came. I had to leave school and start working to help my family. I have been working in Chennai and in Kerala also. My father just called me back and said I should complete my schooling. But I am nearly 18, and no school is ready to take me. Anyway, the schools keep closing because of rain and flooding. I don't know what to do now.*
>
> Adolescent Boy (17yo)
> **Sundarbans, West Bengal**

57 Government of India
58 Estimate based on India National Multidimensional Poverty Index 2023 by NITI Aayog and Census 2011
59 Computation of Out-of-School Children Based on UDISE+ 2021-22, Education for All in India, 2022

Children are also forced to leave school to shoulder household responsibilities such as fetching water, collecting firewood, cooking, cleaning, looking after younger siblings and older grandparents, as their mothers are also either moving out to work, or busy with home-based contractual work. These extra burdens fall primarily on girls[60], thus robbing them of their education and ability to live a productive life.

iii. Child Marriage

Climate Shocks & Child Marriage

- Girls Not Brides[61]

Over recent decades, climate change has triggered extreme weather events – including floods, droughts and cyclones – causing acute and protracted crises. These have affected economies and social structures. Countries with high vulnerability to climate "shocks" often also have high rates of child marriage.

When faced with economic hardship, families often resort to adverse decisions like child marriage to reduce the size of their households and meet their basic

60 The climate crisis and violence against children, Office of the Special Representative of the Secretary-General on Violence Against Children, 2022.

61 Child marriage and conflict & crisis, Girls Not Brides, 2021

needs. Marrying off their young daughters is not just their way of temporarily easing their own financial burden (to look after more children) but is also their misguided way of trying to ensure the girl's own security. Social norms such as lower dowry for younger brides also perpetuate the decision to marry off girls at an early age.

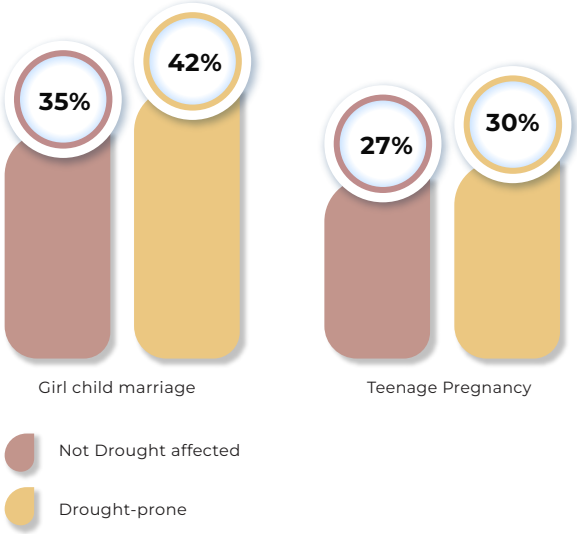
> *I had a group of 6 friends in school. We did everything together. We used to laugh a lot. But now only one friend is left. The others have got married or had to leave school because their families are very poor. I hold on tight to my last remaining friend - we are both terrified at the thought of losing each other.*
>
> Adolescent Girl (16yo)
> **Sundarbans, West Bengal**

Climate disasters also disrupt social networks and lead to an increase in physical and sexual violence. Given that safety and protection are seen not as rights, but as private family responsibilities, child marriage is also used as a way to protect girls from other forms of violence, including harassment and sexual assault[62],

62 Ending violence against children while addressing the global climate crisis, World Vision International, 2020

without considering the violence and exploitation that the girl will most likely face in her marital home. It is estimated that **15 million women aged 20-24 were married before the age of 18** and face extreme forms of harm, including sexual abuse and violence[63]. Girls who are married before the age of 15 are also **50% more likely to experience physical or sexual violence** compared to those who marry after 18[64].

Impact of droughts on adolescent girls in India[65]



Research based on 50 years of government data (1971-2021), shows that drought-prone districts in India have a much higher incidence of child marriages, driven by a series of crop failures. Even the incidence of teenage pregnancy appears to be much higher due to societal pressures as well as lack of sexual and reproductive knowledge among adolescents. Moreover, young girls lack the emotional preparedness required to leave their families and take on all kinds of responsibilities and commitments in the marital home, resulting in a sense of powerlessness and hopelessness that then pervades the rest of their lives.

63 Estimation based on NFHS-5 (2019-21) and Census of India (2011)

64 Gender-based violence and child marriage, Girls not Brides, 2021

65 How does climate change impact women and children across agroecological zones in India, MS Swaminathan Research Foundation, 2024

3. Climate Disasters and the Disruption to Children's Development Needs

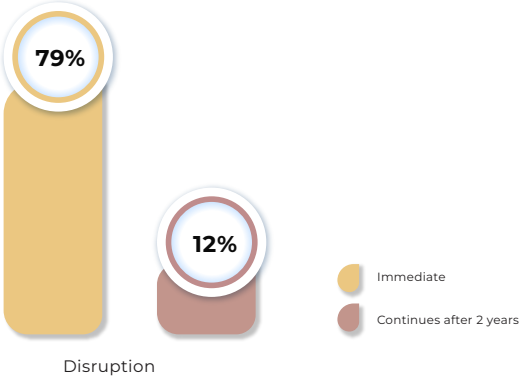
i. Education

Climate disasters cause school closures, either because infrastructure has been destroyed or damaged, or because school premises have been repurposed as emergency shelters.

> *When school shuts down in the summer holidays or due to climate events like floods or cyclones, I no longer get benefit of the mid-day meal scheme. My family finds it difficult to feed me during such times.*
>
> Adolescent Boy
> **Sundarbans, West Bengal**

Depending on the severity of the climate event, this could carry on for weeks if not months, leading to major disruptions in children's learning. For far too many poor children, this break eventually leads to them dropping out of school altogether.

Disruption in education reported after cyclones and floods[66]



In the aftermath of cyclones Amphan and Yaas, 3/4 households in North and South 24 Parganas (West Bengal) reported an immediate disruption in children's education, many of whom have continued to be irregular at school even 2 years after the event. Many households reported that they had to send their children to work to make ends meet.

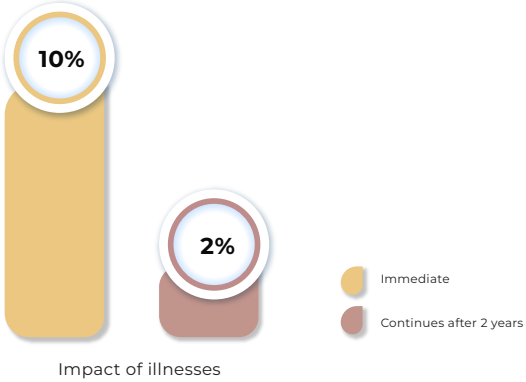
66 The Aangan Trust (2023).

Rising temperatures pose a different threat to children's education as heat not only affects their physical health but also impedes the brain's cognitive functions, decreasing children's ability to process and retain information. A study in geographies affected by heatwaves revealed that **96% of teachers believed that students' concentration was affected and 54% said their academic performance declined**. Due to the repercussions of heat on physical health, teachers reported that many parents avoid sending their children to school on excessively hot days[67].

ii. Health

Serious climate events like floods and cyclones invariably lead to contaminated food and water supplies, create favourable conditions for mosquitoes, resulting in an outbreak of vector and water borne diseases. Children from poor families are far more susceptible to these illnesses due to their already weak or underdeveloped immune systems and higher level of exposure. In addition, climate disasters disrupt access to timely medical care that can lead to worsening of their illnesses, often resulting in death.

Incidence of illness among children in the aftermath of cyclones Amphan and Yaas[68]



A study in 2 districts of West Bengal affected by cyclones Amphan and Yaas showed that children were immediately impacted by various illnesses, the effects of which continued to impair their well-being even ~2 years after the cyclone.

67 Impact of Escalating Heat Waves on Students' Well-Being and Overall Health, A Survey of Primary School Teachers, Climate, 2023

68 The Aangan Trust (2023).

Young children are also extremely vulnerable to the impacts of rising heat since their bodies are less efficient at regulating temperature, making them more prone to dehydration, heatstroke, heat cramps and other heat related health concerns. A study in 35 elementary schools across districts reporting heatwaves (2023)[69] showed that 22% students experienced fainting spells and 29% experienced severe headaches due to the heat.

iii. Emotional Well-being

The sudden and disruptive nature of climate disasters and the destruction they cause is terrifying for anybody, but especially for children who experience an immediate onset of fear and stress. The distress caused by having to live in temporary shelters among strangers, uncertainty and loss – of family, friends, familiar surroundings and their way of life – are all very difficult things for children to cope with.

The disruption of normal life, along with worries about meeting their basic needs and ensuring future stability, further exacerbates their anxieties. This trauma, coupled with lack of awareness and delivery of mental health services, can lead to the development of serious mental health illnesses such as major depressive disorders and post-traumatic stress disorder (PTSD). When left untreated, PTSD can have long-term repercussions on children's cognitive development – children with PTSD often have lower IQ scores, problems with memory, etc[70].

69 Impact of Escalating Heat Waves on Students' Well-Being and Overall Health, A Survey of Primary School Teachers, Climate, 2023.

70 The effect of trauma on the brain development of children, Australia Institute of Family Studies, 2016 and Can Childhood Trauma Cause Memory Loss?, Sabino Recovery, 2024

I feel scared of going to school. We had to stay there for many days when the big storm came – Amphan. Those days were very frightening. I didn't like being there, we didn't feel safe with so many strangers everywhere. This year we had to stay there again and I kept getting bad dreams about the last time. I don't want to go to this school anymore. It reminds me of bad things.

Adolescent Girl (13yo)
Sundarbans, West Bengal

~38% of adolescents exhibit signs of PTSD, depression, or generalized anxiety one year post a super-cyclone in **Odisha**[72].

82% of **tsunami-affected adolescents** in Tamil Nadu[73] developed PTSD in a few months after the event. The prevalence was higher among girls.

In India, **~50 million children** already struggle with mental health illnesses[71] – climate disasters will further exacerbate their challenges.

Research shows that even 6 years post cyclone Ockhi in Tamil Nadu, survivors continue to get flashbacks and PTSD related to the event, as well as depression

71 Improving child and adolescent mental health in India, Status, services, policies, and way forward, Indian Journal of Psychiatry, 2019

72 Post-traumatic stress disorder, depression and generalized anxiety disorder in adolescents after a natural disaster, a study in comorbidity, Clinical Practice & Epidemiology in Mental Health, 2006

73 The Prevalence of Posttraumatic Stress Disorder Among Children and Adolescents Affected by Tsunami Disaster in Tamil Nadu, Disaster Management & Response, 2007

and insomnia. Some of the survivors that were primarily involved in fishing have not been able to get back to the sea due to traumatic flashbacks[74].

To escape their existing circumstances many children run away and even contemplate risky actions like migrating on their own with suspicious agents or getting married.

> *I think about running away a lot. All my friends say that running away or getting married is much better than staying here.*
>
> Adolescent Girl (17yo)
> **Sundarbans, West Bengal**

iv. Nutrition

Children need to consume more food and water per unit of body weight than adults and any nutritional deprivation can have both immediate and lifelong impacts for them. Undernutrition contributes to the severity of a range of diseases and is already responsible for nearly half of the deaths of children under five[75]. Climate disasters lead to crop loss, scarcity of food resources and consequential increase in the price of food. All these factors exacerbate food insecurity and contribute to reduced nutritional outcomes for children.

The immediate impact of undernutrition can be seen on children's weight (wasting), which if not solved for through relief and rehabilitation efforts, can lead to stunting – a condition that is chronic and irreversible. Stunting among children is associated with lower school performance, cognitive impairment and weakened immune systems, thereby having a long-term impact on their quality of life as well as their entire future.

74 Six years on, cyclone Ockhi survivors battle lingering mental health impacts, Mongabay, 2023
75 The Climate Crisis is a Child Rights Crisis, UNICEF, August 2021

Severe Child Malnutrition Risk Rises by 30-60% in Highly Vulnerable Districts

- PLOS One

A study found that the odds of a child suffering from stunting increased by 32%, wasting increased by 42%, being underweight increased by 45% and being anaemic increased by 63%, if the child belonged to a district categorized as very highly vulnerable to climate when compared to those categorized as very low[76].

Impact of drought on children's nutrition[77]

Research based on 50 years of government data (1971-2021), revealed that the drought-prone regions in India are more prone to child malnutrition, with children reporting high deficiencies in vitamins, iron, protein, etc., as well as low caloric intake:

- **26%** were more likely to be underweight (ages 0 – 5 years)
- **6%** were more likely to be stunted (ages 0 – 5 years)
- **35%** reduction in minimum dietary diversity (ages 6 – 23 months)

76 Vulnerability of agriculture to climate change increases the risk of child malnutrition, Evidence from a large-scale observational study in India, PLoS ONE, 2021

77 How does climate change impact women and children across agroecological zones in India, MS Swaminathan Research Foundation, 2024.

4. Climate Disasters Exacerbate Existing Vulnerabilities

Discrimination in the distribution of aid becomes apparent in the aftermath of a disaster as certain groups are systematically overlooked, leading to an inequitable access to shelter, food, medical care, etc. This creates a vicious cycle that pushes already marginalized families and their children deeper into poverty while increasing their risk of experiencing the worst and most severe impacts of these disasters.

i. Caste based discrimination during relief measures

In many Indian villages, Dalit families are compelled to reside in colonies segregated from the main settlements inhabited by dominant castes. These neighborhoods are often situated in low-lying areas that are more susceptible to disaster damage and are farther away from main paved roads, making them difficult to access during disaster relief efforts.

During Cyclone Fani, 36% of scheduled caste members were turned away from cyclone shelters in Puri, Odisha as dominant caste members refused to share shelters with them[78]. Another study in Kerala showed that 50% of Dalit Christians reported that there were separate water sources and receptacles for Dalits and members of dominant castes even in the shelters[79].

ii. Gender-based violence post disasters[80]

Research from drought-prone regions of Marathwada, Maharashtra, indicates that 21% of women have experienced an increase in gender-based violence from male family members. This rise in violence is attributed to men becoming aggressive and venting their frustration with economic hardships caused by droughts on women and children.

78 Cyclone Fani: Tracking Inclusion of Dalits, Adivasis, Minorities and other Maginalised Communities in the Disaster Response, National Dalit Watch and Ambedkar Lohia Vichar Manch, Odisha, 2019

79 The Extent of Inclusion of Dalit and Adivasi Communities in the Post-Disaster Response in Kerala 2018, National Dalit Watch - National Campaign on Dalit Human Rights, 2018

80 A Study on the Impact of Droughts catalysed by Climate Change on the Dalits and the Adivasis of Marathwada region of Maharashtra, National Campaign on Dalit Human Rights, 2022.

4

THE RIGHT THING TO DO

THE MANY IMPERATIVES FOR CENTERING

CHILDREN IN CLIMATE ACTION

It is unacceptable to everyone that children, who have contributed nothing to the climate crisis, are among the ones suffering its harshest impacts. To safeguard their safety and well-being, stakeholders in climate action and sustainable development must urgently recognize and address the growing threats to children—many of which are worsening due to the climate crisis. There is an immediate need for substantial investments in children. Failure to act now could have catastrophic consequences for India's development.

I have no dreams for my future. Both my parents have gone to work in Delhi. I miss them. I want to join them. Maybe I'll find something to do over there.

Adolescent Boy (15yo)
Sundarbans, West Bengal

1. Good Economics and Sustainable Development

There is a compelling economic rationale to protect vulnerable children from the impacts of climate change. Climate change and development are inextricably linked and action on climate change is essential for the achievement of all the Sustainable Development Goals (SDGs)[81].

Increased risks to nutrition, health, safety and education of children due to climate change will have a profound impact on children's economic contribution as they grow and enter the workforce.

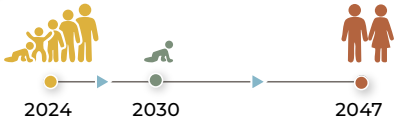
Shagun Sabarwal
Regional Director, Asia, Co-Impact

The learning loss that this generation of children will encounter due to school shut-downs and schools being inaccessible due to climate related shocks has a very strong linkage to their labour force participation down the line. This narrative is completely absent at the national level.

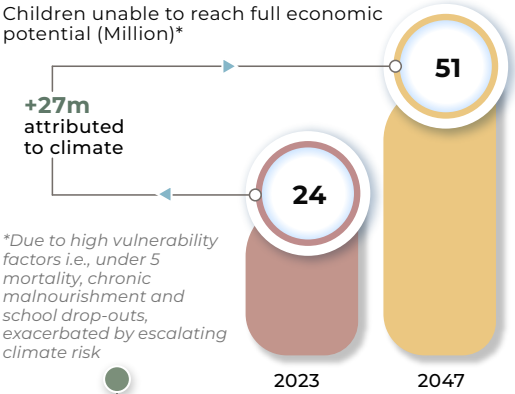
81 The climate crisis and violence against children, Office of the Special Representative of the Secretary-General on Violence Against Children, October 2022.

Our analysis reveals that India could face a **~5.5% impact on GDP by 2047** if the climate impact on vulnerable children is left unaddressed. This analysis includes children who will be born six years from 2024 and will be 18 by 2047. These children would form ~50% of the workforce by 2047.

50% *of India's workforce in 2047 will comprise of children already born or that will be born over the next six years*

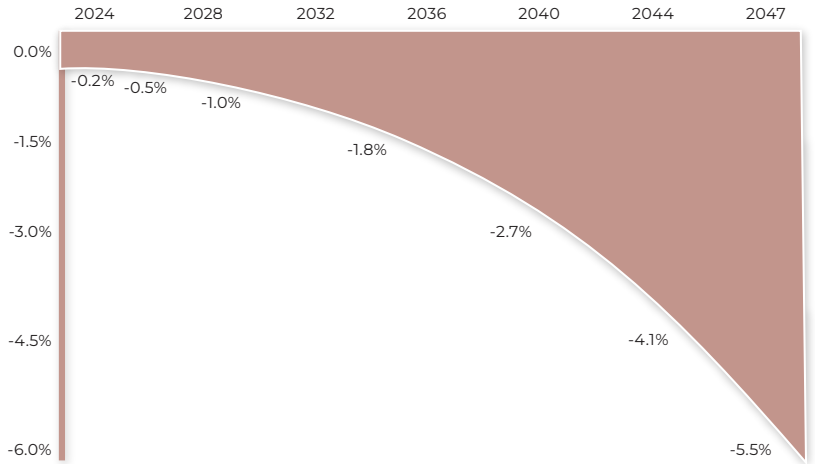


27m *children entering the workforce by 2047 may be unable to contribute meaningfully due to climate impact*



**Due to high vulnerability factors i.e., under 5 mortality, chronic malnourishment and school drop-outs, exacerbated by escalating climate risk*

5.5% *potential GDP lost if climate effects on vulnerable children are left unaddressed*



It is estimated[82] that **~27mn children** who would be eligible to enter the workforce by 2047 will be unable to contribute meaningfully as they will be exposed to long-term vulnerabilities owing to the impact of increased climate disasters.

> *My younger sister and I live with my grandparents since my parents migrated to Chennai for work after the floods. I go to school sometimes. Mostly I go out on the fishing boats. We are out on the water for many days at a time. It's quite risky and also very tiring work. But I earn some money now and that helps my family. I feel proud about it. I really want to help them. Education won't help me now.*
>
> Adolescent Boy (13-14yo)
> **West Bengal**

82 Based on conservative estimates piecing together the few data points that exist to measure children's development.

This estimate is a conservative one. It considers the following key pathways to children's vulnerability as well as the multiplicative impacts of climate change.

Indicator	Size	Rationale
Parameter: Pathways to vulnerability		
Child deaths due to under 5 mortality[83] (U5MR)	*1M*	• *To be comprehensive and avoid double counting, U5MR and chronic malnourishment (severe wasting) was considered for ages 0-5 and out of school children were considered for ages 6-18* • *Chronically malnourished children are most at* **risk of morbidity and mortality**, *have* **poorer cognitive development** *and* **reduced immunity.** *They are at a* **higher risk of dying** *and of* **poor growth and development[84]** • *Out-of-school children are* **most at risk of safety and protection challenges[85]**, *which are subsumed within this estimate.*
Chronically malnourished children[86]	*10M*	
Children out-of-school[87] and at risk of harm (child labour, early marriage)	*13M*	

83 NFHS-5 (2019-21)

84 Effects of Malnutrition on the Immune System and Infection and the Role of Nutritional Strategies Regarding Improvements in Children's Health Status, A Literature Review, Nutrients, 2023

85 Child labour, child marriage, sexual abuse etc.

86 NFHS-5 (2019-21)

87 Computation of Out-of-School Children Based on Administrative Data (UDISE+ 2021-22), Education for all in India, 2022

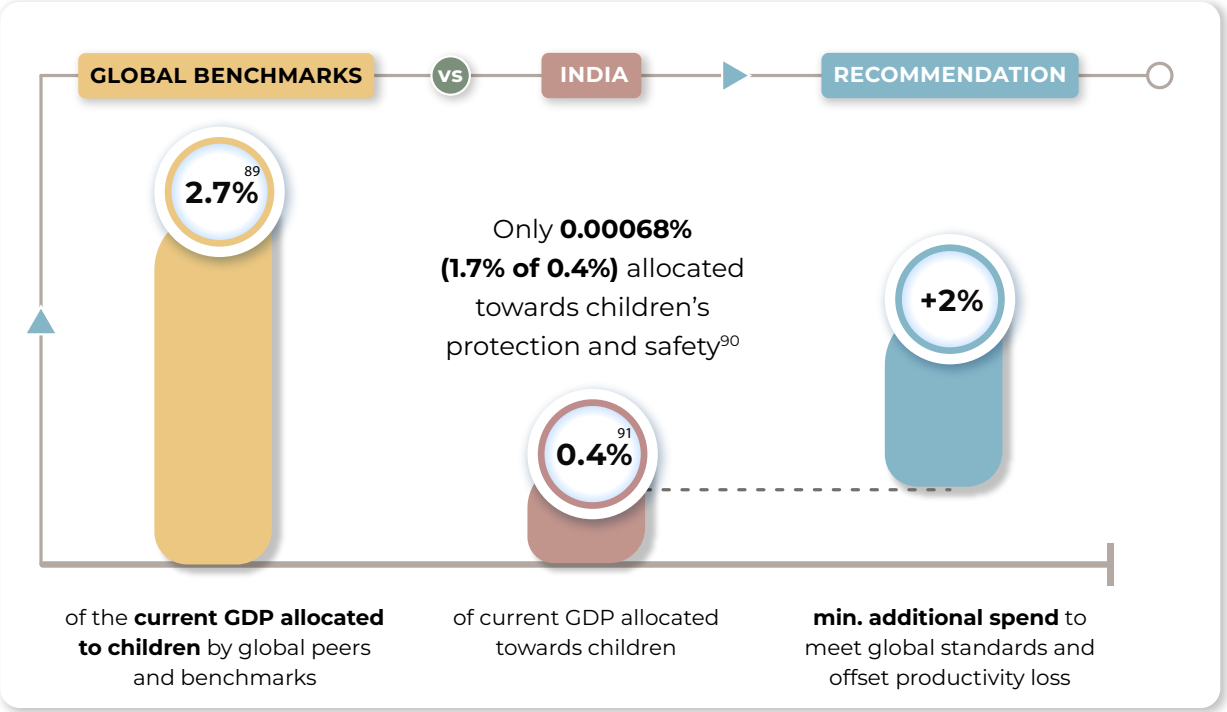
		• *Note: This is a* ***highly conservative estimate*** *as it considers only the children most at risk and not all vulnerable children. Moreover, the data for children out of school calculates only those never enrolled and excludes children highly susceptible to harm such as those who work and go to school, or those who are irregular.*
Parameter: Multiplicative climate impact		
Impact of extreme weather events on population by 2050[88] (base case)	*2X of current population*	*By 2047, the already existing effects of child vulnerabilities will be amplified by climate risks. This translates to an* ***incremental annual impact of 3% attributable to climate change as a baseline estimate.***

India's future growth is contingent on the proactive protection of its vulnerable children from the onslaught of climate disasters and shocks **today**. The benefit of adopting child-centered development and investing in children will transcend generations, lead to better educational outcomes, higher lifetime income levels, reduction in expenditure on welfare services and improved governance. It will also contribute to achieving key Sustainable Development Goals (SDG) such as SDG 3 (Good Health and Well-Being), SDG 4 (Quality Education), SDG 5 (Gender Equality), SDG 8 (Decent Work and Economic Growth), SDG 10 (Reduced Inequalities) and SDG 16 (Peace and Justice, Strong Institutions).

88 India: Migration from climate change getting worse, DW, 2023 and Bridgespan analysis.

2. Acting Early will Multiply Impact: Bridging the Finance Gap for Children

Investing in children is not just necessary, it is also urgent because the overall funding levels for children in India are already substantially lower than global benchmarks.



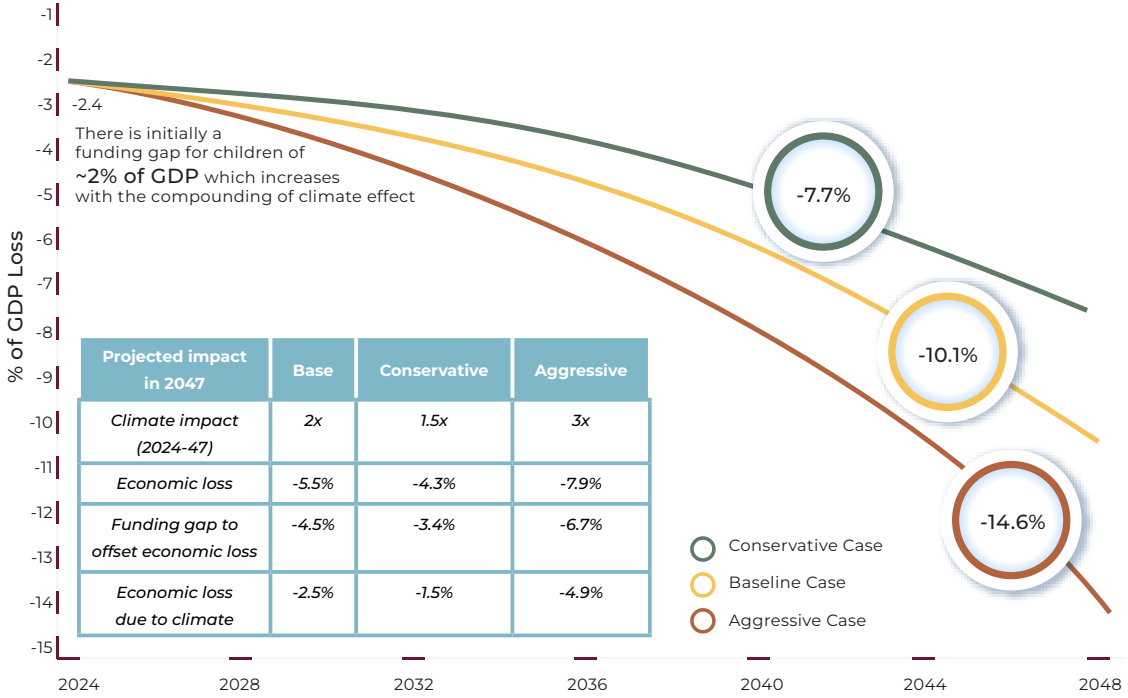
89 Bridgespan analysis of comparative peers.

90 Pushed and Juggled Beyond the Margins, Budget for Children 2022-23, HAQ, Centre for Child Rights, 2023

91 Pushed and Juggled Beyond the Margins, Budget for Children 2022-23, HAQ, Centre for Child Rights, 2023; Bridgespan analysis

We estimate that India needs to allocate, at the very least, an additional 2% of its GDP to children's safety, well-being, education, health (physical and mental), nutrition and development to be comparable to its peers and global standards, and more importantly, to offset the potential loss of 5.5% to the GDP due to workforce unproductivity described earlier in this section. Should this 2% of GDP investment not be made today, then that 5.5% loss could balloon to as high as 10-15% of the GDP by 2047.

Immediate and decisive child-centric actions taken today will therefore be **7X more cost effective** than if we were to delay and take action at a later date.



Projected impact in 2047	Base	Conservative	Aggressive
Climate impact (2024-47)	*2x*	*1.5x*	*3x*
Economic loss	*-5.5%*	*-4.3%*	*-7.9%*
Funding gap to offset economic loss	*-4.5%*	*-3.4%*	*-6.7%*
Economic loss due to climate	*-2.5%*	*-1.5%*	*-4.9%*

Note on table: **Economic loss** refers to loss of GDP as vulnerable children today are unable to contribute.
Economic loss attributable to climate refers to the portion of economic loss due to incremental impact of climate on today's vulnerable children

3. Justice and Morality

Children, like all other human beings, have a fundamental right to a clean environment. In a milestone judgement, the Honourable Supreme Court of India[92] has recognized a right to be protected against the adverse effects of climate change – rooted in two fundamental rights guaranteed by the Constitution – the Right to Equality (Article 14) and the Right to Life (Article 21)[93].

Climate Justice: Protecting the Right to Life and Health

- Honourable Supreme Court of India

Without a clean environment which is stable and unimpacted by the vagaries of climate change, the right to life is not fully realized. The Right to Health (which is a part of the Right to Life under Article 21) is impacted due to factors such as air pollution, shifts in vector-borne diseases, rising temperatures, droughts, shortages in food supplies due to crop failure, storms, and flooding. The inability of underserved communities to adapt to climate change or cope with its effects violates the right to life as well as the right to equality.

92 M K Ranjitsinh & Ors. v. Union of India & Ors., 2024 INSC 280.

93 The disproportionate impact that climate change has on children has been acknowledged by senior government officials.

The Court highlights the importance of ensuring that climate actions serve the needs of **all** affected people, including vulnerable children who are most affected by climate events. By recognizing the particular issues underserved communities face due to climate change - their inability to adapt or cope – as a violation of their right to life, the Court sends a stern message reminding us of our collective responsibility as a society to ensure the protection of vulnerable communities and to make sure children are shielded and protected from the worst impacts of the climate crisis.

As child vulnerability is an issue that cuts across development programming and planning, including in the sectors of climate change, health, nutrition, child protection and social protection[94], it is essential that we integrate a child-centric lens in all of our development strategies, priorities and actions.

94 Measuring the Determinants of Childhood Vulnerability, UNICEF, March 2014.

SUNDARBANS, WEST BENGAL

REBUILDING HOME

Kalyani, 15 years old, lives with Deboo, her 8-year-old brother in North 24 Parganas, in the Sundarbans. Their home is under gradual reconstruction as the rest of their family - mother, father, older brother - are in Chennai and Rajasthan painting walls, working on a construction site and as a factory worker respectively, saving their money so that their home can be built. Kalyani's guardians in the village are her maternal grandparents, who live in the same vicinity, but are unable to be of much help, caught up as they are with their own ill-health and struggles for survival.

In the absence of adult family members, Kalyani has to run the house and ensure her brother goes to school. She herself has had to drop out and she spends her days cooking, cleaning and running errands for her grandparents. She has recently been given a mobile phone by her mother so they can keep in touch and at least know each other's whereabouts.
Kalyani's parents left for Chennai one by one as local opportunities to earn money reduced and the interest on the

loan (from the local moneylender) kept mounting.
When Cyclone Aamphan hit in 2020, Kalyani's house was destroyed like many others. The family had just about started to re-build it when Cyclone Yaas hit land the very next year. The family was left with no choice but to borrow money to at least ensure a safe shelter for the children. The small amount received as financial assistance

from the state was not enough and the salination of land due to stagnated seawater meant that there were no immediate means to generate an income. Kalyani's parents went one after the other to Chennai through common contacts. The eldest son of the family, 17-year-old Madhab, was also sent to Rajasthan through agents to work as a helper in a factory.

Madhab sends a small sum every month to build their home. He and his father keep in touch over weekly calls. But for the last 2 years, they have not seen Madhab, who lives in a room on the factory premises with 10 other boys, all working 12-hour shifts. This year, Madhab decided not to go home for Durga Pooja because the money from working overtime would help build his house sooner.

In the last 2 years, the family has been able to build a 1-room house where Kalyani and Deboo now live on their own. As time passes, the family realizes that even when the house is finally constructed, the possibility of going back to their old life is

unlikely. As is common in the Sundarban region, their plot of land emerged and became cultivable over time. They, like most other families, don't have documents of land ownership. There is a possibility that while they are away, their land could be slowly taken over by adjacent cultivators. The family is not only scattered in three different directions of the country, but they are also not hopeful that they will be able to go back and begin again.

Adding to that, the 3 children, who have no adult support and diminishing safety nets, are navigating risks on an everyday basis. The lack of parental supervision and support, along with Kalyani dropping off the school system's radar, coincides with her finding a sense of stability in young romantic love. But there isn't the support to ensure she doesn't make reckless decisions of getting married to seek legitimacy or

falling prey to traffickers. In fact, her parents are considering an early marriage for her to some other man just as a way to keep her safe.
Madhab, on the other hand, who is working 12-hour shifts in a factory in Rajasthan, sees no way back home, and is vulnerable to all kinds of exploitative practices and abuse as he navigates an adult work environment alone.

Due to the changing conditions in the region, all the 3 children have experienced the loss of home, family and care, which has an obvious long-lasting impact on their emotional well-being. On top of that, they are now also vulnerable to multiple and compounding threats and risks – physically, sexually and emotionally. The ever-increasing impact of climate change also means that there are more unforeseen circumstances yet to unravel in the times ahead.

I live in Gheri village with a river on one side and the Bay of Bengal on the other. After the Amphan cyclone, I borrowed a lot of money to repair the house because the rebuilding compensation was not enough. We were struggling to repay the loan as there was not much earning opportunity locally. My husband had to go out of the district for work and I had to work for daily wages to make ends meet. We can't look after our children now; my elder son dropped out of school after 10th grade and joined his father for work in Kerala as a labourer. The situation is the same for almost every household in our village.

Woman resident, **Namkhana Block, South 24 Parganas, West Bengal**

There are a few girls from our school who had affairs with men they met and then ran away. When probed further about why the girls left home...maybe they thought this is the best option and their situation will improve. Their parents are not here, they are all working outside because everyone's financial condition is bad.

Adolescent girl (16yo), **Kakdwip Block, South 24 Parganas, West Bengal**

5

PLACE BASED APPROACH

DISPROPORTIONATE AFFECTS ON DIFFERENT GEOGRAPHIES

NAVIGATING FOCUS AREAS

Climate data shows that climate hazards affect different geographies disproportionately. Data also reveals that there are multiple districts in India that suffer the twin challenges of high climate vulnerability and high child vulnerability. As children living in these districts face the highest risks, it is critical for actions to be focused in these areas, and for actions to attend to both challenges. This place-based approach would not only help concentrate resources and actions where most needed but also help identify the child safety and well-being issues based on lived perspectives on the ground and enable solutions to be tailored in a manner that best addresses these issues and their root causes.

1. Analysis of High Climate and Child Vulnerability Districts

i. Methodology and indicators

To understand the combined burden of

climate disasters and child vulnerability, an illustrative analysis has been undertaken[95] on the performance of Indian districts on vulnerability[96] to hydro-met disasters (namely cyclones, flooding and droughts) and on 14 indicators (listed in ***Appendix 1)*** across the following pillars of child vulnerability[97] - (a) safety, (b) health, (c) nutrition, (d) education, (e) institutional support, and (f) marginalization/ existing vulnerabilities.

ii. Data Limitations

The analysis in this section is subject to the following limitations:

a. non-availability of district-wise data on key child vulnerability indicators such as working children (5-18 years), missing children, street children, migrant children, trafficked children and orphaned children;
b. non-availability of district-wise data for GINI Index, access to financial services, social security net spending and low birthweight of children;
c. non-availability of district-wise data relating to net enrollment ratio at secondary/ senior secondary levels (grades 9-12);
d. non-availability of district-wise data on children (aged 5-18) who are (i) not enrolled in school, (ii) are enrolled in school but not attending school, or (iii) are attending school irregularly, and
e. the climate vulnerability data uses CEEW's Climate Vulnerability Index and covers only 463 of the total districts of India, 340 of which have some degree of climate vulnerability, and 324 of which

95 Bridgespan analysis based on a sample of 324 districts vulnerable to climate-related disasters as per CEEW's Climate Vulnerability Index.

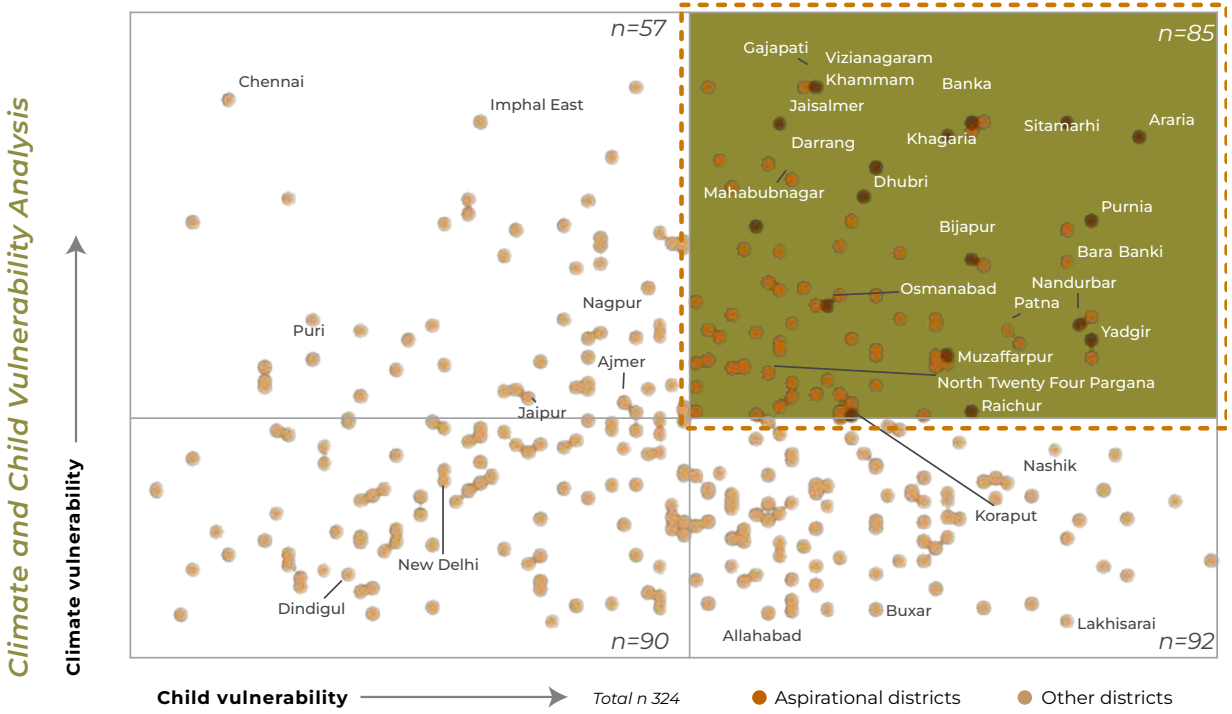
96 Climate vulnerability leverages CEEW's Climate Vulnerability Index.

97 Child vulnerability analysis leverages the indicators from UNICEF's Children's Climate Risk Index (CCRI).

were a part of this analysis due to unavailability of data for the remaining 16 districts.

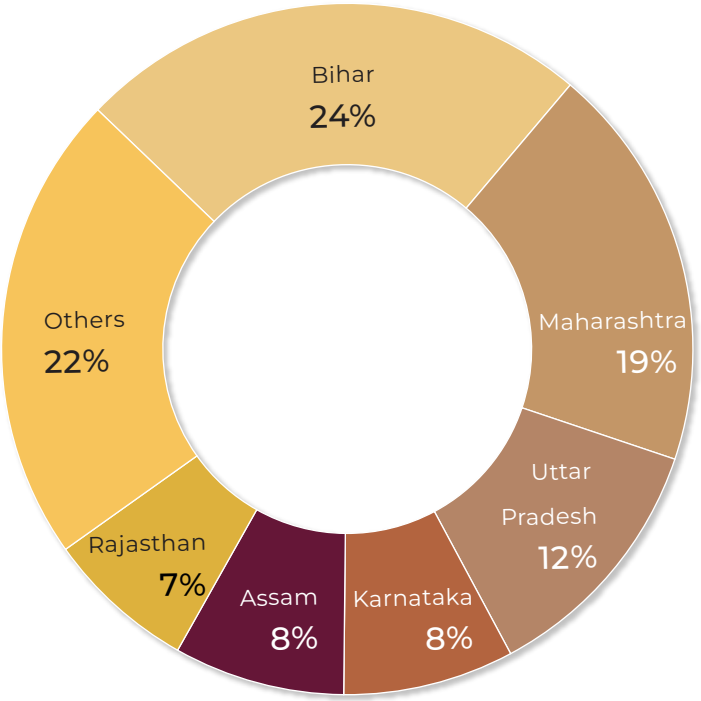
iii. District-wise Climate and Child Vulnerability Analysis

The analysis covered 324 districts identified as having some degree of climate vulnerability according to CEEW's Climate Vulnerability Index. The chart below plots these districts against their relative climate and child vulnerability scores, revealing that **85 districts** (in the top right quadrant) exhibit the highest levels of both vulnerabilities in India. **With a rise in extreme weather events and climate disasters, these districts could become hotspots for the child vulnerability issues set out in section 2**



of this report.

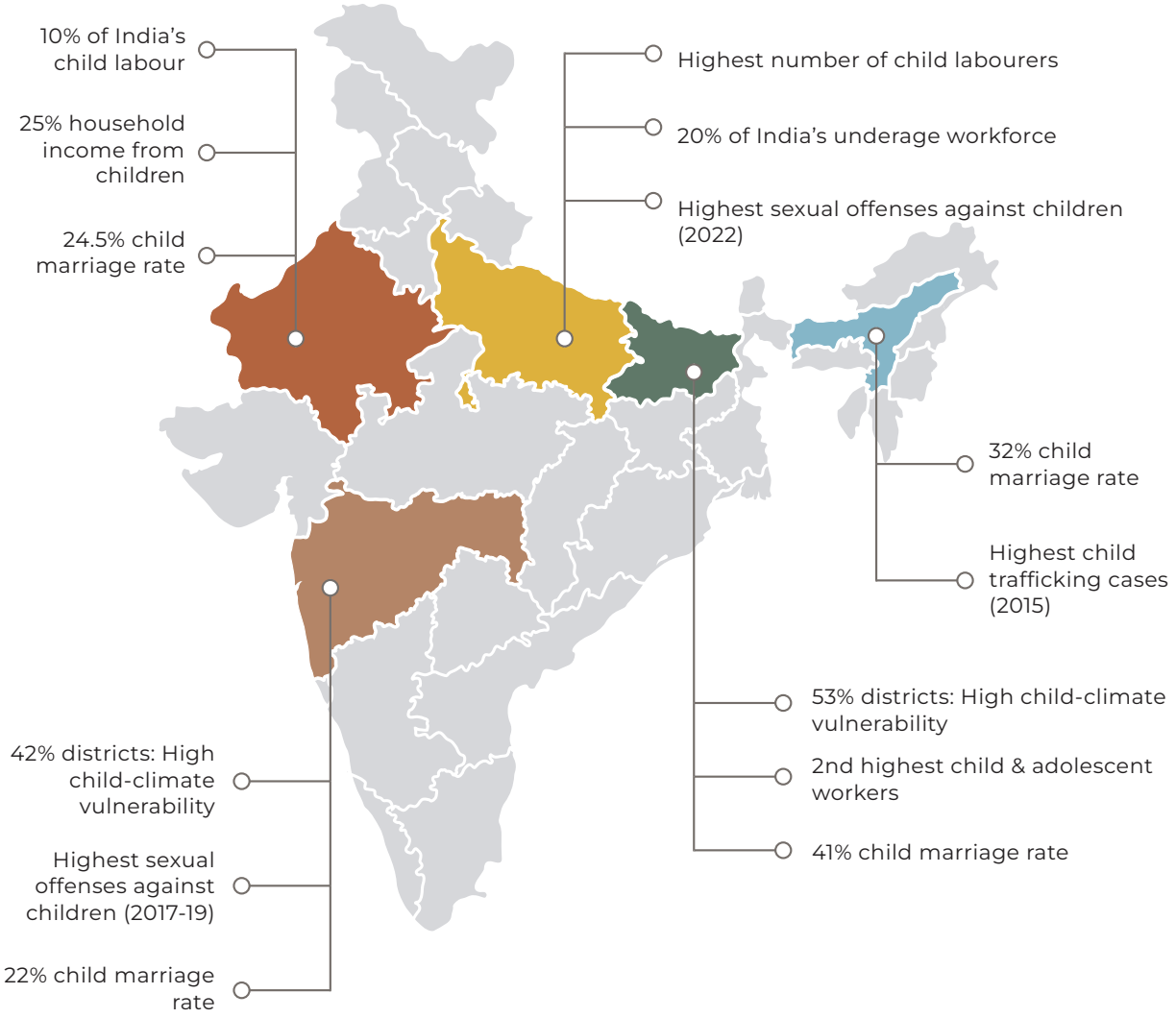
85 most vulnerable districts[98] in India are concentrated in 6 states



Of the 85 vulnerable districts, 18 are aspirational and of these 18, 14 fall in the top 6 most vulnerable states (highlighted above). In addition to the top 6, states such as West Bengal (5%), Andhra Pradesh (5%) and Odisha (4%) are also at extremely high risk. These states are also prone to climate disasters and face child safety and well-being challenges, especially in districts that are located at or near the coastline.

98 Bridgespan analysis based on a sample of 324 districts vulnerable to climate-related disasters as per CEEW's Climate Vulnerability Index.

iv. Climate-Child Hotspots in India



- In **Bihar**, 53% of the districts are exposed to high child-climate vulnerability. Bihar has the second-highest number of child and adolescent workers[99], and child marriage, at 41%[100], remains a persistent problem.
- In **Maharashtra**, 42% of the districts are exposed to high child-climate vulnerability. In 2017-19[101], Maharashtra reported the highest number of sexual offenses against children in the country, and 22% of women had child marriages (2019-21)[102].
- **Uttar Pradesh** has the highest number of child labourers, who comprise 20% of India's underage workforce[103], and in 2022 had the highest number of cases of sexual offenses against children[104].
- **Assam** has a high rate of child marriages at 32%[105] and in 2015 had the highest number of child trafficking cases[106].
- **Rajasthan** contributes to 10% of India's child labour[107] and a study suggests that 25% of household earnings are by children[108]. It also has a high prevalence of child marriages, with 24.5% of women reporting they were underage brides[109].

99 Census of India 2011.
100 NFHS-5 (2019-21).
101 Maharashtra tops in POSCO crimes, 50% of victims lured online, Times of India, 2020
102 NFHS-5 (2019-21).
103 Census of India 2011.
104 UP tops list with 67,000 pending Posco cases, Maharashtra next in line, Times of India, 2023.
105 Child marriage and other crimes against children in Assam, Satyarthi, 2022
106 Crimes in India, National Crime Records Bureau, 2015 and 40 per cent human trafficking crimes occurred in Assam and WB, The Hindu, 2016.
107 Rajasthan rank high in child labour, Times of India, 2012.
108 Rajasthan rank high in child labour, Times of India, 2012.
109 NFHS-5 (2019-21).

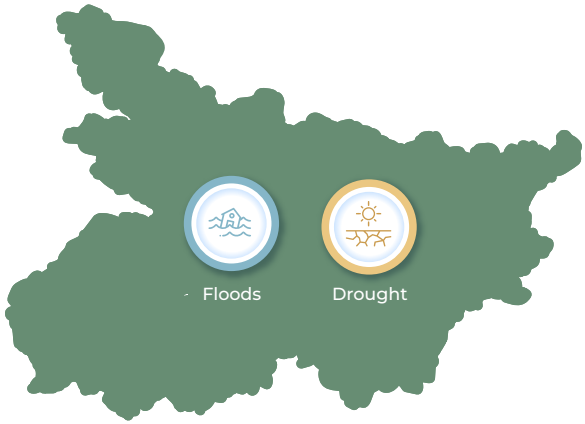
2. Diving Deeper: Analysing Hyperlocal District Data

The overlap of climate and child vulnerability issues can be better understood through our focused analysis of the available (if limited) data on child protection and well-being in the high climate vulnerability states of Bihar, Maharashtra, Uttar Pradesh and Rajasthan.

i. BIHAR

Flooding - Bihar (especially the Northern region)[110] experiences heavy flooding. In 2023 alone, 500+ people lost their lives to flooding[111] during monsoon, which was the highest in India.

Droughts - On the other hand, Bihar is also at a high-risk of droughts[112]. In 2023, Bihar had a ~26% deficit in rainfall[113].



110 Fighting Flood and Drought, Millions in Bihar Lose Livelihoods, The Wire, 2019
111 Hill states make headlines but Bihar tops monsoon toll, Times of India, 2023
112 Fighting Flood and Drought, Millions in Bihar Lose Livelihoods, The Wire, 2019
113 26% rainfall deficit in Bihar this monsoon, Times of India, 2023

Performance of high-risk districts on key parameters of child vulnerability

Aspirational Districts*	Top 4 Vulnerable Districts[114]					
	India	Bihar	Araria*	Sitamarhi*	Madhepura	Banka*
Under 5 mortality (per 100,000 children)[115]	*80*	*84*	*101*	*95*	*83*	*77*
Stunting (% of children under 5)[116]	*35%*	*43%*	*50%*	*54%*	*46%*	*47%*
Net enrollment (% of children in grades 6-8)[117]	*70%*	*79%*	*48%*	*57%*	*72%*	*67%*
Incidence of children working (% of children aged 5-18)[118]	*19%*	*40%*	*49%*	*48%*	*49%*	*44%*
Incidence of child marriages (% of women aged 20-24 married before 18)[119]	*23%*	*41%*	*52%*	*47%*	*52%*	*49%*

114 Bridgespan analysis.

115 Indirect Estimates of District wise IMR and Under 5 Mortality using Census 2011 data, National Health Systems Resource Centre, 2021

116 NFHS-5 2019-21.

117 UDISE 2013-14.

118 Estimate based on Niti Aayog MDPI and Census 2011.

119 NFHS-5 2019-21.

REGIONAL LENS: BIHAR

In August 2008, flooding in the river Kosi severely affected around 1,000 villages in Bihar, including those in Araria and Madhepura. The floods led to enormous economic losses to the tune of approximately INR 5,935 million and also resulted in temporary displacement of about 1 million people, with over 440,000 people

living in relief camps for 4 months. A study on the impact of these floods on the timing of marriage in Bihar found that the floods led to a 3.6 percentage point increase in the incidence of female child marriage. The effect on child marriage was found to be stronger in districts that experienced greater destruction of property due to the floods. The floods also reduced the secondary school completion rate among married women by 8 percentage points, induced an earlier initiation into conjugal life, a lower age at first birth and resulted in lower labor force participation for women[120].

A survey[121] undertaken by Save the Children in the two flood affected districts of Araria and Khagaria found that 7.7% of the children in the 5 to 18 years old group had been trafficked. The survey found that poverty, widespread landlessness and marginalisation, low levels of education, low levels of female

120 Natural Disasters and Child Marriages, A Case Study from Bihar, Centre for the Advanced Study of India, 2020.

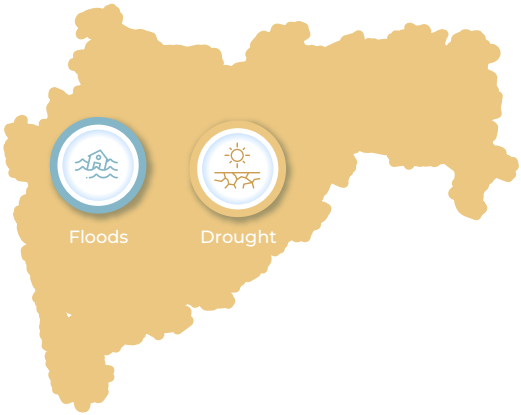
121 The survey was undertaken in 4,111 households comprising 8,252 children of the 5-<18 year age group.

literacy and lack of employment options for adults due to inter alia repeated natural disasters and lack of infrastructural development, combined to create a scenario of child labour and child trafficking. Majority of the trafficked children came from households that reported high levels of indebtedness, and debt servicing was a major compulsion which made parents send their children into conditions that led to their being trafficked[122].

122 Stolen Childhoods, A Study of Child Trafficking in the Kosi Region of Bihar, Save the Children, 2011 and Child trafficking a serious problem, Amanullah, Times of India, 2011

ii. MAHARASHTRA

Since 1970, Maharashtra has seen a 7x increase in drought events and a 6x rise in frequency of flood events[123]. Consequently, in 2023, 66% districts were drought-affected[124] and 10,000 homes were destroyed in floods[125].



123 After 10 years & Rs 9,630 crore, scheme for drought-proofing Maharashtra can provide water to just 487 people for a year, Down to Earth, 2024

124 Drought in 66% of Maharashtra as state includes more 224 revenue circles in the list, Hindustan Times, 2024

125 Maharashtra, Paralysed woman among four dead in Nagpur floods, Fadnavis takes stock of situation, IndiaTV, 2023

Performance of high-risk districts on key parameters of child vulnerability

	Top 4 Vulnerable Districts[126]					
	India	Maharashtra	Sangli	Dhule	Solapur	Ahmad-nagar
Wasting (% of children under 5)[127]	*19%*	*26%*	*19%*	*39%*	*23%*	*25%*
Net enrollment (% of children in grades 6-8)[128]	*70%*	*76%*	*73%*	*65%*	*73%*	*74%*
Incidence of crimes against children[129] (crime cases per 1M children)[130]	*123*	*312*	*279*	*132*	*54*	*185*
Incidence of child marriages (% of women aged 20-24 married before 18)[131]	*23%*	*22%*	*27%*	*41%*	*40%*	*27%*

126 Bridgespan analysis.

127 NFHS-5 2019-21.

128 UDISE 2013-14.

129 Crimes against children include human trafficking, selling and buying of minors for prostitution, rape, murder, kidnapping and abduction of children (which includes missing children deemed as kidnapped, other kidnapping & abduction, kidnapping and abduction for the purpose of begging, kidnapping and abduction in order to murder kidnapping for ransom, kidnapping and abduction of minor girls to compel her for marriage) and procuration of minor girls and importation of girls from foreign country.

130 Estimated based on NCRB, V.V. Giri National Labour Institute & UNICEF (2011).

131 NFHS-5 2019-21.

REGIONAL LENS: MAHARASHTRA

The water starved villages of Marathwada in Maharashtra rely heavily on annual cycles of sugarcane labour migration. Persistent droughts, frequent crop failures and high unemployment compel the locals to migrate annually to the surrounding cane fields.

Since recruitments in sugar producing regions take place in

husband-wife pairs, there is a high incidence of 'gate-cane weddings' - where women and adolescent girls are married following the peak drought months in the region in the run-up to, or during, the cane harvesting season. As per the National Family Health Survey 5 (2019–21), 43% of women throughout the Marathwada region[132] reported underage marriages. Marathwada's rate of underage marriages stands at double that of Maharashtra state (22%) and India (23%). The rates of underage marriages in the severely drought-prone and high migrant-sending districts of Beed (51.3%), Jalna (49.9%), and Parbhani (44.5%) in the NFHS 4 (2015–16) were comparable to India's (50%) and Maharashtra's (47.3%) figures in the 1990s (NFHS 2, 1998–99)[133]. Teenage pregnancies are also much higher in the sugar producing districts of Maharashtra (8% to 18.6%) as compared to the national average (7%)[134].

Conditions in sugarcane producing districts are often worse

132 Based on an average of the national survey data reported by women in the 20–24 age group across the eight districts of Marathwada region.

133 Gate-Cane, (Un)tying the knots between climate, cane, and early marriage in rural India, Climate and Development, 2024

134 India's female cane cutters face child marriage and hysterectomy, Climate Home News, 2022

for women and adolescent girls. For example, in the drought-affected district of Beed, where many adolescent girls from other drought-prone regions of Maharashtra migrate to in hunt of work[135], sugarcane harvesting becomes a very demanding task due to the extreme heat. Women and girls suffer the dual responsibilities of working in the fields and handling all the household chores (even when pregnant), with limited access to health and sanitation facilities. Sexual harassment and abuse in the fields by labour contractors, male labourers, middlemen, etc., is also very common and mostly goes unreported[136].

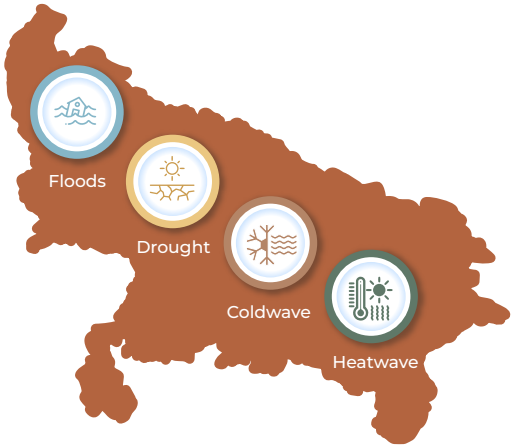
135 Over the past two decades, economic migration among women has surged. As per the Census 2011, between 2001 and 2011, the number of women migrating for work grew by 101%, more than double the rate for men.

136 India's female cane cutters face child marriage and hysterectomy, Climate Home News, 2022

iii. UTTAR PRADESH

In 2023, Uttar Pradesh saw 119 extreme weather days – the 3rd highest among all states in India[137]. Uttar Pradesh is **affected by droughts, floods, heatwaves, as well as cold waves**. Climate change has made **heatwaves 2x more likely in Uttar Pradesh[138]**. In 2022, **flooding affected 245,000+ people in the state[139]**.

As per an analytical study on Disaster Risks and Resilience in India published by the Ministry of Home Affairs and the United Nations Development Program, Uttar Pradesh has the highest child vulnerability index[140]. Uttar Pradesh also ranks high on the disaster risk index[141] and low on the disaster resilience index[142].



137 Every state, UT saw extreme weather event on at least 1 day in 2023, Report, Economic Times, 2023

138 Climate Change Made UP Heatwave at Least Two Times More Likely, Climate Index, The Wire, 2023

139 India – Floods in Uttar Pradesh Affect 245,000, FloodList, 2022

140 Child vulnerability index has been worked out on the basis of four indicators, age group of children, children not attending school, children working, and infant mortality rate.

141 Disaster risk index considers the combined risks of all hazards, including the vulnerabilities and exposures associated with the hazard. The disaster resilience index considers risk assessment, risk prevention and mitigation, risk governance, disaster preparedness, disaster response, disaster relief & rehabilitation and disaster reconstruction.

142 UP kids top in climate change vulnerability index, Deccan Herald, 2023, UP battles child vulnerability index concerns, Times of India, 2023 and Disaster Risks and Resilience in India, United Nations Development Program and Disaster Management Division, Ministry of Home Affairs, 2019

Performance of high-risk districts on key parameters of child vulnerability

	Top 4 Vulnerable Districts[143]					
	India	UP	Barabanki	Kushinagar	Pilibhit	Jalaun
Under 5 mortality (per 100,000 children)[144]	*80*	*102*	*125*	*108*	*114*	*76*
Stunting (% of children under 5)[145]	*35%*	*40%*	*42%*	*32%*	*39%*	*45%*
Net enrollment (% of children in grades 6-8)[146]	*70%*	*57%*	*46%*	*49%*	*51%*	*65%*
Incidence of crimes against children (crime cases per 1M children)[147]	*123*	*194*	*154*	*234*	*76*	*171*
Incidence of children working (% of children aged 5-18)[148]	*19%*	*17%*	*34%*	*33%*	*33%*	*21%*

143 Bridgespan analysis.
144 NHSRC.
145 NFHS-5 2019-21.
146 UDISE 2013-14.
147 Estimated based on NCRB, V.V. Giri National Labour Institute & UNICEF (2011).
148 Estimated based on NCRB, V.V. Giri National Labour Institute & UNICEF (2011).

REGIONAL LENS: UTTAR PRADESH

Bundelkhand, a chronically drought prone region of Uttar Pradesh (made worse due to extreme weather events), suffers multiple problems such as water insecurity, distress migration, food insecurity, lack of access to WASH services, etc. Women are forced to travel long distances in search of water and are unable

to partake in child care responsibilities due to this.

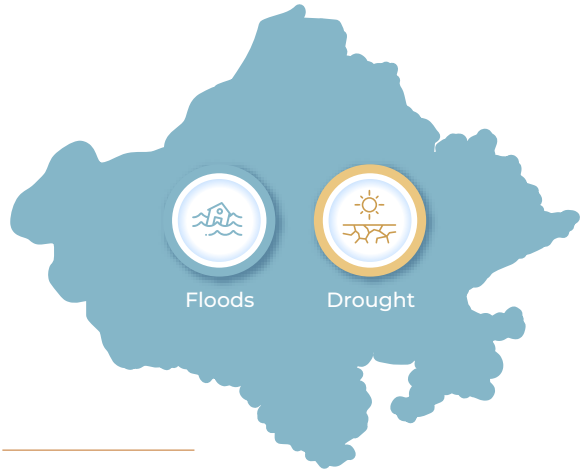
Adolescent girls are also tasked with water collecting duties and often made to drop out of school to take care of their siblings and perform household chores. Food insecurity caused by droughts has made hunger rampant, which has not only led to the demise of livestock, but also impacted the nutrition of children on account of lack of dairy consumption. Food insecurity has also perpetuated the incidence of child marriages in these regions[149].

149 WaterAid and Photo Essay | Bundelkhand, Parched and desolate, Livemint, 2016

iv. RAJASTHAN

Droughts - Over 90% of Rajasthan's districts are prone to droughts[150]. In addition, only 20% of the land is irrigated by canals[151] and rest depends on groundwater, which remains deficient due to lack of rainfall.

Floods - Known for its dry weather, certain districts have started receiving excess rainfall which leads to flooding. In 2023, western districts (with history of droughts) experienced rainfall 300% in excess to baseline[152].



150 Creating an oasis, CEEW, 2022

151 Excessive rain in eastern Rajasthan, deficit in western, Hindustan times, 2021

152 Climate impact: Rajasthan's pre-monsoon rainfall was three times more than average this year, Down to Earth, 2023

Performance of high-risk districts on key parameters of child vulnerability

Aspirational Districts*	Top 4 Vulnerable Districts[153]					
	India	Rajasthan	Jaisalmer*	Jalor	Jodhpur	Banswara
Under 5 mortality (per 100,000 children)[154]	*80*	*88*	*76*	*85*	*77*	*133*
Stunting (% of children under 5)[155]	*35%*	*32%*	*26%*	*44%*	*33%*	*45%*
Net enrollment (% of children in grades 6-8)[156]	*70%*	*62%*	*40%*	*48%*	*52%*	*58%*
Incidence of children working (% of children aged 5-18)[157]	*19%*	*22%*	*38%*	*31%*	*20%*	*39%*
Incidence of child marriages (% of women aged 20-24 married before 18)[158]	*23%*	*25%*	*29%*	*23%*	*28%*	*25%*

153 Bridgespan analysis.
154 NHSRC.
155 NFHS-5 2019-21.
156 UDISE 2013-14.
157 Estimate based on Niti Aayog MDPI and Census 2011.
158 NFHS-5 2019-21.

REGIONAL LENS: RAJASTHAN

The Barmer district of Rajasthan is frequently prone to droughts. As droughts persist, the economy and employment opportunities have dried up. Further, crop losses have forced families, who rely on agriculture for their livelihood, to pull their children out of schools and

put them to work in odd jobs (e.g., farm and construction labour) to make ends meet. In 2018, 50% of students (under 18) enrolled in government schools in Siwana dropped out of schools by the end of academic year to support their families. Scanty rainfall in Siwana had led to crop loss and also forced several families (mainly from nomadic and tribal communities) to migrate in search of employment opportunities[159].

159 Drought in Rajasthan, From unemployment to school dropouts, Barmer sees exodus for works as crops fail, Firstpost, 2019

1. Data Gaps: Way Forward

In order for place-based interventions to be more meaningful, there is an urgent need to collect accurate, reliable and complete district-wise data on all aspects of climate and child vulnerability (including on data limitations highlighted in this section). This will enable accountable parties to (i) adequately plan, prepare for and respond to climate disasters and shocks, (ii) ensure that climate action plans are child-centered, well-devised and address the child vulnerability issues arising in a particular district; (iii) engage in a more meaningful way with the local governance bodies and communities in policy development and service delivery; and (iv) allocate adequate financial, technical and human resources to address issues and deliver services on the ground.

6

SHIELDING FUTURES

HOW TO PROTECT VULNERABLE CHILDREN FROM

THE IMPACTS OF CLIMATE CHANGE

Climate change is a wicked problem. There are multiple ways to address it and how we understand and explain it will determine the ways in which we solve for it. Given the complex, unpredictable, multifaceted, and evolving nature of climate change itself, addressing the myriad impacts it has and will continue to have on vulnerable children will require multiple solutions over time, and possibly, time and time again. There is no silver bullet and what we need is an approach - a way to think about safeguarding children no matter who we are or what we do.

1. *YoungEarth Approach: A Child-Centered Strategy for Climate Action to Protect Today's Child and the World She Inhabits*

Undeniably, children must be recognized as citizens and affected persons in their own right, with

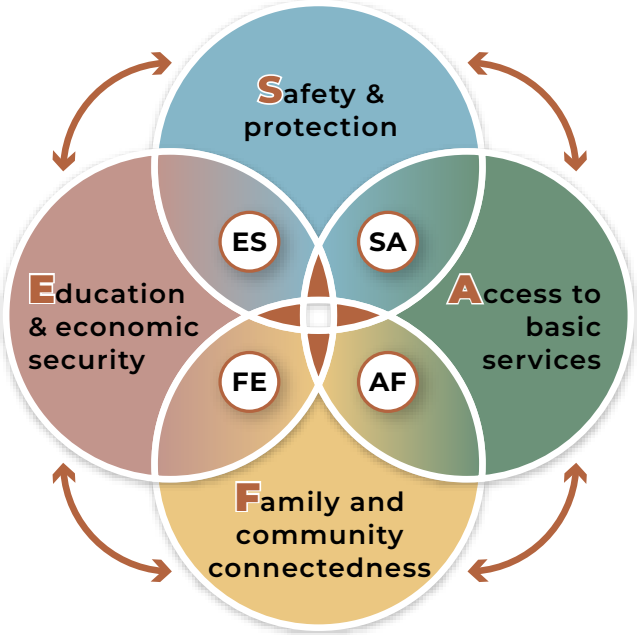
specific needs and entitlements. Equally undeniable is that they need urgent actions to be taken by all concerned and accountable parties (the government, philanthropy, industry, civil society organizations and communities) to address their safety and well-being, especially in high-risk districts for climate and child vulnerability. A YoungEarth Approach requires anyone engaged in climate action to:

i. **Replace siloed work** *in either climate action or child protection and development with cross-sectoral, coordinated, integrated and sustainable actions in partnership with multiple accountable parties to safeguard children's well-being as a whole.*
ii. **Prioritize child safety and well-being** *in all aspects of disaster/ crisis management, be it preparedness, adaptation and resilience, response and relief and/ or long-term rehabilitation.*
iii. **Consider the interconnectedness** *of children's needs across four domains – safety and protection, access to basic services, family and community connectedness and education and economic security (more details in the SAFE Framework Box below) while planning interventions for children.*
iv. **Ask themselves the following child-centered questions iteratively:**
    a. *How does our climate strategy / solution impact the safety, health, education and well-being of vulnerable children?*
    b. *What fears or concerns do children and their families have?*
    c. *Could our approach unintentionally increase risks or create new challenges for vulnerable children and their families?*
    d. *Does our action ensure long-term resilience for vulnerable children and their families in the face of climate change?*

UNDERSTANDING CHILDREN'S NEEDS

The S.A.F.E. Framework for Children's Security and Well-being is a great place to start

The S.A.F.E. Framework concerns itself with the conditions needed for the survival, physical safety and development of children at risk in the face of many forms of adversity from HIV/AIDS to humanitarian crises, natural disasters, and comprehensive social and economic breakdowns. Using a human rights framework grounded in the UN Convention on the Rights of the Child (UNCRC), the S.A.F.E. Framework examines four fundamental and interrelated domains of children's safety and well-being:



Vulnerabilities or deficits in any one of the four domains will inevitably have direct and cascading effects on other domains. For children living in high climate vulnerability zones, this interconnectedness is described below.

S – *Children/ family members are at risk of being killed, injured, displaced or getting sick*

SA – *Livelihoods, farming, food security and access to basic necessities are impacted*

A – *Children/ families rely on external aid for access to food, nutrition, healthcare, WASH services, social security, alternate livelihood schemes, shelter and other necessities*

AF – *Children's/ families' inability to access these basic services correlates to increased loss of life and livelihood and contributes to lack of family cohesion and unsafe migration*

F – *Family and supportive social infrastructure can suffer due to loss of livelihoods, displacement, unsafe migration and long-lasting damage of climate disasters*

FE – *Unsafe migration, displacement and absence of family/ community support impacts education of children, many of whom are pulled out of school and burdened with household responsibilities*

E – *Limited/ no education of children and limited economic opportunities for families due to damage to infrastructure, loss of livelihoods and damage to crops*

ES – *In the face of extreme poverty and lack of economic opportunities, families adopt dangerous coping mechanisms, e.g., pulling children out of school and putting them to work, child marriage, child harm, abuse and violence, etc., all of which negatively impact the safety and well-being of children*

2. *What Needs Doing: Recommendations for Action*

Every effort to mitigate and reverse climate change is important and necessary. This report makes clear the equally necessary imperative to protect children in the here and now of the climate catastrophe. Just as mitigation requires us to reimagine how we inhabit the earth – our consumption, our development, our business practices, our lifestyles – similarly, we must reimagine our policies and regulations, and our funding priorities for children across sectors and interventions.

i. Government

By adopting a child-centered lens in all its climate policies and commitments, the government can send a strong message across the ecosystem about its intent to safeguard children and recognize them as an independent category of affected persons in every aspect of climate action.

a. Enact a Comprehensive Climate Hazards Policy

This policy should protect vulnerable children and families from the impacts of all climate events:

- ***Protect** vulnerable children and their families from the impacts of climate events that fall outside the current legislative framework of "disasters".*
- ***Provide** adequate institutional and financial support to vulnerable populations (especially children) impacted by any climate events that are beyond their capacity to cope.*
- ***Strengthen** the Disaster Risk Reduction framework by expanding guidelines for emerging climate issues and defining what*

rehabilitation entails in areas that are impacted by multiple and frequent climate hazards, what distinguishes relief from rehabilitation, and at what stage state support and responsibility ends.

- ***Amend** the current loss and damage compensation framework to compute for losses that are hard to quantify, e.g., loss of livelihood, loss of income for daily wage workers, migrant labourers, street vendors, etc., loss of social and care networks due to displacement and migration, losses that are faced by people who have nothing material left to lose.*

b. Child-Centered Provisions Ensuring Children's Safety, Development and Well-being Before, During and After Serious Climate Events

The current legislative frameworks for climate disasters rarely consider children as an independent category of affected persons and hence do not cater to their specific needs and rights with appropriate services that are financed and monitored. Moreover, children in areas of recurring crisis require long-term support as they and their families navigate survival and adaptation. The following actions can be taken to meet the needs of children in disaster prone zones:

***A.** Portable and Individualized Access to Food and other Social Security Benefits*

Food security and other social security schemes, benefits and safety nets should be linked to individual members of each family, including children, and should be portable (accessible in any state or district), to

cater to the needs of children displaced due to climate disasters, migrant children, children living away from their parents or other categories of vulnerable children outside family care.

Why? *Because migration and displacement result in situations where families are wrenched apart and adult members of a family who are entitled to receive benefits of social security and nutrition schemes (in the aftermath of a disaster), are living in different geographies from their children, who are in dire need of those benefits.*

B. Community-based Care and Supervision for any Child (0-18 years) Separated from Family/ Adult Caregivers

Build, operationalize, finance and staff community childcare schemes and/or centers at village/ panchayat or ward level to facilitate care for all categories of vulnerable children, not just during but also post occurrence of climate disasters. Children of all ages (0-18) are in need of adult supervision and care in different ways. Care facilities can include hostels, creches, day-care centers, extending schemes like the kinship care scheme, all with a view to ensuring children do not lose connection with family and community.

Why? *Because climate hazards are leading to migration, displacement and the upsetting of existing social networks, which result in children across age groups (0-18) living without adult supervision or with minimal supervision, thus exposing them to various child safety and well-being issues.*

C. *Accessible Schools and Uninterrupted School Services for Children*

The Education department must work with local authorities to map, track, enroll and ensure the regular attendance of all school eligible children. They can create hostels so that children are not forced to migrate with parents, create out-of-cycle admission protocols for children who are forced to become either seasonal or circular migrants, allow for inter-district and inter-state portability of the mid-day meal scheme, and provide for language and remedial support for migrant children.

Why? *Because beyond the immediate disruption to school and school-related service (such as the critical mid-day meal program, a key government provision for children's nutrition) in the aftermath of a climate disaster, children are often forced to be alone or on the move or be engaged in labour or other difficult circumstances, and unable to access school. They lose out on learning, on food, on social engagement with peers and the institutional support that schools bring. This loss becomes irretrievable and must be prevented at all costs.*

c. Fixing the Data Deficit on Children

There is an urgent need to collect reliable and accurate data across sectors for all children aged 0-18 years at national, state, district, block and village level on:

- *the status of children across gender and age groups (0-18) on physical and mental health, school attendance (as distinct from*

enrollment), health, work and employment status, marriage, trafficking, missing children, child-headed households, etc.

- *the impact of climate disasters on all the above-mentioned aspects of child safety and well-being.*

ii. Industry

Industry can contribute significantly to protecting vulnerable children by building family and community resilience. To do this, they must proactively undertake child-centered audits and impact assessments across their value chains, ensure child-centric norms are adopted within all their practices, and strengthen worker welfare across all their operations.

a. Conduct Child Impact Assessments

Companies/ businesses must conduct regular child impact assessments to determine if their operations and policies, including culture, work environment, business and manufacturing processes, products, etc., are inadvertently harming children or depriving them of their rights. Assessments must be followed up with mitigation/ remediation plans and a system to monitor action taken. These should be conducted across their value chains. Where relevant, these should be included in ESG reporting.

b. Track Supply Chains

As thousands of children are forced to go to work to combat the economic losses they face due to climate change, it is very important for companies to be vigilant across their supply chains about employing child labour and about the

conditions young people are working in. Companies must create transparency across their supply chains to track raw materials and components from the point of origin to finish. This way they can track where children are in their supply chain and also take necessary remedial actions to address the root causes of child labour, if it exists, through a series of measures like providing education, living wages / alternate employment to their parents or finding other solutions that are in the best interest of children.

c. Strengthen Worker Welfare

Companies must take responsibility for the welfare of formal and informal workers and children across their supply chains. This means ensuring that they pay a living wage (that is sufficient for employees to meet their family's basic needs) to all their workers, and that the benefits of formal work are available to informal workers as well. The commitment should apply to all their operations and throughout their supply chain. Companies can also consider contributing to emergency response funds and building infrastructure to reduce the effects of climate shocks to workers and their families, particularly in high climate vulnerability districts.

iii. Funders

Funders can play a catalytic role in protecting vulnerable children in high climate vulnerability districts by supporting interventions for safe adaptation, harm prevention, resilience-building and holistic child-centered solutions.

a. Earmark at least 5% funds for child-centered strategies for climate action annually

Funders should allocate 5% of their annual philanthropic funding[160] to a "YoungEarth Approach" for child centered strategies for climate action (this represents a 9-15x increase from current funding levels[161]) to safeguard vulnerable children in high climate-risk districts. The SAFE Framework will help funders think about cross-sectoral collaborations which will also ensure development progress isn't lost during climate disasters.

b. Prioritize Funding for Districts that are High-risk for both Climate and Child Vulnerability

Prioritize support for the work of communities, grassroot collectives and community-based organizations working in high climate or child vulnerability districts, on SDGs or on child safety and well-being issues. We need to child-proof climate change while also climate-proofing children's attainment of their rights.

c. Support Locally Led Adaptation

Support and build the capacity of communities to determine, own and participate in the strategies necessary to map risks, build long-term resilience as well as to respond to climate disasters and shocks when they occur, including accessing government benefits and social security schemes and assuming collective responsibility for child well-being in the immediate and long-term aftermath of climate disasters.

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160 *Bridgespan analysis based on benchmarking.*

161 *Assuming an ideal GDP allocation of 2.7% to children.*

7

SCOPE & LIMITS

LIMITATIONS OF

THIS REPORT

This report is subject to the following limitations, in addition to those set out in the introductory section:

- *The **unpredictability of climate disasters** would have multi-fold effects on some of the analysis in this report.*
- *There may also be a **substantial timing delay in the publishing of certain data**. For instance, our estimates have relied on the Census 2011 data for information on India's demographics, particularly those pertaining to caste. Given the intervening years, this data may not be fully accurate or representative.*
- *The **impact of slow-onset climatic events** such as heatwaves, cold waves and sea-level rise **have not been considered** as primary extreme weather events as part of our analysis. We have also **excluded extreme heat***

events *as part of our place-based analysis (due to non-availability of data) and* ***air quality and pollution have not been considered*** *in our analysis.*

- *We have* ***focused on climate adaptation*** *in this report, as opposed to mitigation. The impact of climate mitigation efforts on child vulnerability has not been analyzed or discussed in this report.*

- *The needs of children and their vulnerability to the climate are many and they are evolving. Therefore, action needs to be contextualized basis the communities and ecosystem that the children themselves operate in.* ***The recommendations from this report are not exhaustive****, and as such, must be reassessed in due intervals to meet the ever-evolving needs of vulnerable children.*
- *The key theme from this report has been the growing need to protect vulnerable children from the adverse impacts of climate change and climate disasters. While there are more direct ways to do so, as this report lays out, the lack of data and evidence makes it even more challenging to put together a compelling narrative. This has been our attempt to bring together various pieces of the puzzle but there is a definite need for timely, accurate data to be made available for more effective and informed action.*

8

GLOSSARY & ANNEXURES

GLOSSARY

Wherever used in this report, the following words have the meanings assigned herein:

Child Harm	*Any action or inaction that causes physical, emotional, or psychological damage to a child. It encompasses a wide range of abusive or neglectful behaviors including physical abuse, emotional abuse, sexual abuse, neglect, exploitation, violation of rights, etc., that results in actual or potential harm to the child's health, development or dignity.*
Child-centricity	*An approach, perspective, system or action that prioritizes the well-being, safety, development, health, nutrition, education, needs and rights of children. It recognizes children as individuals with independent and unique experiences, capabilities and rights, and seeks to ensure that they are at the center of decision-making processes, policies, interventions and actions.*
Child Safety	*Measures and practices in place to protect children physically, emotionally, psychologically and from violation of their rights to ensure well-being in various environments including homes, schools, communities and online spaces.*

Child Vulnerability	*A child may be considered vulnerable in a particular situation or event, if there is a high probability that relative to other children in the population, that situation or event will cause a negative outcome for the child. The degree of child vulnerability may vary depending on other factors including caste, economic background, gender, marital status, etc., of a child. Please also refer to section 2 of the report.*
Climate Disasters	*A catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence, which results in, among other things, loss of life, human suffering or damage to and destruction of property and infrastructure, loss of livelihoods, or damage to or degradation of the environment.*
Climate Risk	*Potential loss of life, injury, destroyed or damaged property, infrastructure and assets, economic and social disruption and environmental degradation, which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of climate change, hazards, exposure, vulnerability and capacity.*
Disaster Management	*Continuous and integrated process of planning, organising, coordinating and implementing measures which are necessary or expedient for— (i) prevention of danger or threat of any disaster or emergency; (ii) mitigation or reduction of risk of any disaster or emergency or its severity or consequences; (iii) capacity-building; (iv) preparedness to deal with any disaster or emergency; (v) prompt response to any threatening disaster situation or disaster or emergency; (vi) assessing the severity or magnitude of effects of any disaster or emergency; (vii) evacuation, rescue and relief; (viii) rehabilitation, recovery and reconstruction.*

Displacement	*Forced movement of people from their homes or places of residence due to various factors, typically involuntary and often sudden.*
ESG	*Environmental, Social and Governance, which are three key factors used to evaluate the sustainability and ethical impact of an investment in a company or business.*
Extreme Weather Event or Climate Shock	*Severe and unusual weather phenomenon that significantly deviates from the typical weather patterns of a region (in the form of droughts, floods, heat waves or other events that have been exacerbated by climate change) and has the potential to cause substantial damage including to people, property, infrastructure, the environment, livelihoods, ecosystems, services, resources, human health and well-being and economic, social, or cultural assets.*
Hydro-met Disasters	*Disasters that are primarily caused by hydro-meteorological phenomena and include floods, cyclones, and droughts.*
Infrastructure	*Physical structures, facilities, networks, systems and assets, which provide services that are essential to the social, educational, ecological, economic and day to day functioning of a community or society.*
Rehabilitation	*Process of restoring individuals to their fullest physical, mental, social, vocational, educational and economic potential after experiencing injury, illness, disability, disaster or other adverse circumstances.*
Systemic Marginalization	*Structured exclusion of certain groups or individuals from various aspects of social, political, educational and economic participation, often through ostracization. The exclusion may arise from a number of aspects including the class status, social group identity (kinship, ethnicity, caste and race), political affiliation, gender, age and disability.*

Working Children	*All children under the age of 18 who are engaged in any form of work whether formal or informal, in family-run enterprises or in their households.*

ANNEXURE

ANNEXURE 1 *Methodology for deriving child and climate vulnerabilities across districts (non-exhaustive list)*

Indicator	Sub-indicators	Source	Assigned weight
Child vulnerability			
Child health	*Under 5 mortality rate*	*National Health Systems and Resource Centre*	*10%*
	Proportion of children aged 12-23 months who have received 3 doses of penta or DPT vaccine	*NFHS-5*	
	Proportion of children aged 12-23 months who have received 2 doses of MCV vaccine	*NFHS-5*	
Child nutrition	*Prevalence of stunting among children under 5*	*NFHS-5*	*20%*
	Prevalence of wasting among children under 5	*NFHS-5*	
	Low-birthweight	*Data not available at district level*	

Indicator	Sub-indicators	Source	Assigned weight
Child vulnerability			
Education	*Net enrollment ratio at primary level (grades 1-5)*	*UDISE*	*20%*
	Net enrollment ratio at upper primary level (grades 6-8)	*UDISE*	
	Net enrollment ratio at secondary/ senior secondary levels (grades 9-12)	*Data not available at district level*	
Child Safety	*Incidence of children working (ages 5 to 18) including those in family enterprises*	*Census 2011, Niti Aayog*	*30%*
	Incidence of crimes per 1,000,000 children	*NCRB 2013, Census 2011*	
	Proportion of women aged 20-24 who were married before turning 18	*NFHS-5*	
Existing vulnerabilities	*Headcount ratio of multi-dimensional poverty*	*Niti Aayog*	*10%*
	Proportion of population that is SC/ ST	*Census*	
	GINI Index	*Data not available at district level*	
Institutional support	*Proportion of households covered under health insurance/ financing scheme*	*NFHS-5*	*10%*
	Access to financial services	*Data not available at district level*	
	Social security net spending	*Data not available at district level*	
Climate vulnerability			
Hydro -met disasters	*CEEW's vulnerability index*	*CEEW*	*N/A*

ANNEXURE 2 Performance of districts with high child and climate vulnerability across indicators

		Health			Nutrition		Education		Child harm			Existing vulnerabilities		Others	Composite score		
Ranks	Regions	Under 5 mortality rate	Coverage of 3 doses of penta or DPT vaccine	Coverage of 2 doses of MCV	Prevalence of stunting among children under 5	Prevalence of wasting among children under 5	Net enrolment ratio - lower primary	Net enrolment ratio - upper primary	Incidence of child labour	Incidence of crime per 1,000,000 children	Women age 20-24 years married before turning 18	Headcount ratio of MDPI	% SC/ ST population	Households covered under a health insurance	Child vulnerability score	CEEW's CVI	Composite score
	India	80	87%	32%	35%	19%	88	70	11%	123	23%	15%	25%	41%			
1	Araria	101	77%	32%	50%	24%	90	48	49%	31	52%	52%	15%	19%	0.81	0.91	0.86
2	Sitamarhi	95	78%	27%	54%	16%	96	57	48%	0	47%	43%	12%	21%	0.78	0.93	0.85
3	Madhepura	83	83%	30%	46%	21%	96	72	49%	106	52%	46%	18%	10%	0.70	0.94	0.82
4	Banka	77	93%	42%	47%	27%	92	67	44%	0	49%	38%	17%	14%	0.69	0.93	0.81
5	Darbhanga	90	78%	30%	45%	19%	89	62	43%	34	45%	35%	16%	25%	0.69	0.92	0.80
6	Khagaria	73	84%	31%	35%	25%	90	68	44%	57	45%	41%	15%	16%	0.68	0.91	0.79
7	Gajapati	136	94%	54%	43%	16%	99	56	30%	158	28%	28%	61%	40%	0.58	1.00	0.79
7	Vizianagaram	53	90%	35%	36%	19%	77	59	14%	94	34%	9%	21%	77%	0.58	1.00	0.79
9	Khammam	75	92%	31%	22%	25%	85	62	10%	444	35%	3%	44%	60%	0.58	1.00	0.79
10	Sangli	53	83%	11%	35%	19%	88	73	8%	279	27%	2%	13%	12%	0.58	1.00	0.79
11	Purnia	100	80%	19%	44%	26%	101	58	48%	43	51%	51%	16%	10%	0.78	0.75	0.76
12	Nagaon	87	74%	10%	39%	19%	99	63	23%	10	43%	21%	14%	59%	0.51	1.00	0.75
13	Dhule	73	67%	19%	38%	39%	88	65	25%	132	41%	21%	38%	20%	0.76	0.73	0.75
14	Jaisalmer	76	78%	19%	26%	25%	81	40	38%	65	29%	22%	21%	94%	0.56	0.93	0.75
15	Darrang	99	77%	12%	42%	27%	104	65	29%	0	43%	24%	5%	54%	0.63	0.85	0.74
16	Bara Banki	125	78%	34%	42%	18%	75	46	34%	154	20%	32%	27%	15%	0.76	0.67	0.72
17	Dhubri	108	83%	32%	49%	22%	123	76	39%	568	51%	26%	4%	59%	0.62	0.80	0.71
18	Jalor	85	85%	27%	44%	12%	76	48	31%	92	23%	17%	29%	97%	0.55	0.86	0.70
19	Mahabubnagar	88	96%	42%	43%	18%	75	53	19%	142	23%	10%	26%	70%	0.57	0.83	0.70
20	Jodhpur	77	86%	23%	33%	13%	77	52	20%	130	28%	17%	20%	88%	0.52	0.86	0.69
21	Bijapur	116	83%	34%	54%	20%	80	31	31%	514	18%	50%	84%	74%	0.69	0.68	0.69
22	Samastipur	73	90%	31%	44%	21%	94	68	43%	31	50%	37%	19%	19%	0.70	0.67	0.68
23	Solapur	55	90%	35%	36%	23%	89	73	10%	54	40%	7%	17%	20%	0.61	0.75	0.68
24	Sheohar	101	75%	20%	34%	35%	96	56	46%	118	35%	34%	15%	18%	0.78	0.57	0.67
25	Ahmadnagar	55	93%	44%	32%	25%	85	74	12%	185	27%	7%	21%	12%	0.53	0.81	0.67
26	Gulbarga	74	87%	26%	35%	25%	105	78	16%	32	30%	19%	28%	17%	0.64	0.69	0.67
27	Nandurbar	75	86%	22%	46%	31%	85	54	40%	92	24%	33%	72%	15%	0.77	0.56	0.66
28	Banswara	133	91%	33%	45%	17%	94	58	39%	89	25%	27%	81%	84%	0.60	0.70	0.65
28	Yadgir	87	91%	25%	58%	18%	93	61	32%	4	33%	25%	36%	17%	0.78	0.53	0.65
30	Goalpara	90	91%	16%	39%	24%	117	75	31%	114	42%	18%	27%	71%	0.54	0.74	0.64
31	Bid	54	85%	23%	41%	28%	92	71	17%	278	44%	13%	15%	9%	0.78	0.50	0.64
32	Patna	86	84%	21%	34%	27%	72	54	22%	17	27%	23%	16%	10%	0.72	0.55	0.63
33	Buldana	69	90%	33%	45%	32%	90	75	14%	242	24%	9%	23%	38%	0.56	0.69	0.63
34	Kishanganj	103	80%	19%	39%	24%	104	61	49%	0	37%	46%	10%	8%	0.73	0.52	0.62
35	Hingoli	66	93%	42%	37%	26%	88	62	21%	71	37%	12%	25%	15%	0.63	0.61	0.62
36	Koppal	101	94%	19%	49%	23%	90	72	19%	17	27%	18%	30%	21%	0.67	0.57	0.62
37	Bongaigaon	82	80%	17%	46%	20%	103	68	26%	18	42%	17%	14%	58%	0.53	0.70	0.62
38	Parbhani	61	76%	18%	38%	23%	95	72	18%	214	48%	15%	16%	11%	0.67	0.56	0.61
39	Kushinagar	108	85%	32%	32%	24%	89	49	33%	234	18%	21%	18%	16%	0.67	0.56	0.61
40	Jalgaon	68	77%	33%	36%	31%	91	71	14%	167	28%	13%	23%	12%	0.60	0.61	0.61
41	Sidhi	122	86%	27%	39%	17%	99	73	40%	378	23%	33%	39%	26%	0.64	0.57	0.60
42	Pilibhit	114	94%	35%	39%	20%	75	51	33%	76	16%	23%	17%	21%	0.58	0.63	0.60
43	Paschim Medinipur	52	94%	41%	31%	30%	101	74	18%	5	56%	18%	34%	26%	0.55	0.64	0.59

		Health			Nutrition		Education		Child harm			Existing vulnerabilities		Others	Composite score		
Ranks	Regions	Under 5 mortality rate	Coverage of 3 doses of penta or DPT vaccine	Coverage of 2 doses of MCV	Prevalence of stunting among children under 5	Prevalence of wasting among children under 5	Net enrolment ratio - lower primary	Net enrolment ratio - upper primary	Incidence of child labour	Incidence of crime per 1,000,000 children	Women age 20-24 years married before turning 18	Headcount ratio of MDPI	% SC/ ST population	Households covered under a health insurance	Child vulnerability score	CEEW's CVI	Composite score
	India	80	87%	32%	35%	19%	88	70	11%	123	23%	15%	25%	41%			
44	Osmanabad	57	93%	34%	37%	16%	81	66	14%	288	37%	5%	18%	15%	0.59	0.59	0.59
45	Jalaun	76	72%	19%	45%	20%	92	65	21%	171	17%	18%	28%	18%	0.56	0.62	0.59
46	Anantapur	104	90%	18%	36%	19%	78	57	10%	117	37%	7%	18%	73%	0.58	0.59	0.59
47	Saharsa	79	85%	35%	48%	20%	95	63	47%	114	51%	49%	17%	13%	0.68	0.50	0.59
48	Muzaffarpur	82	88%	34%	43%	20%	90	66	37%	186	33%	28%	16%	13%	0.68	0.50	0.59
49	Vaishali	77	85%	13%	38%	20%	90	74	36%	108	45%	29%	21%	13%	0.67	0.50	0.58
50	Aurangabad	62	89%	12%	34%	26%	96	76	11%	198	36%	9%	18%	12%	0.68	0.49	0.58
51	Rohtas	82	96%	46%	40%	32%	98	81	31%	157	30%	22%	20%	17%	0.67	0.48	0.57
52	Hardoi	124	77%	28%	45%	22%	120	69	39%	163	19%	34%	31%	16%	0.61	0.53	0.57
53	Bagalkot	87	92%	24%	48%	17%	98	83	15%	25	39%	11%	22%	22%	0.63	0.51	0.57
54	Agra	89	92%	48%	36%	16%	95	44	25%	170	18%	18%	23%	9%	0.57	0.56	0.56
55	Nanded	63	80%	35%	36%	19%	88	64	21%	165	32%	12%	27%	16%	0.63	0.50	0.56
56	Surendranagar	58	75%	31%	39%	27%	84	66	19%	189	20%	11%	11%	50%	0.53	0.58	0.55
57	Guntur	53	98%	40%	24%	18%	77	55	6%	99	35%	4%	25%	71%	0.50	0.60	0.55
58	Raichur	87	84%	19%	40%	23%	97	73	24%	2	22%	20%	40%	18%	0.69	0.40	0.54
59	Ahmadabad	66	80%	13%	35%	18%	82	64	4%	345	18%	5%	12%	36%	0.54	0.54	0.54
60	Akola	72	80%	25%	32%	29%	87	75	10%	388	13%	6%	26%	40%	0.56	0.53	0.54
61	Auraiya	91	89%	23%	40%	19%	111	89	23%	271	18%	19%	28%	18%	0.56	0.51	0.53
62	Bhagalpur	67	91%	52%	40%	21%	91	68	35%	0	42%	27%	13%	16%	0.63	0.44	0.53
63	Baleshwar	75	100%	36%	24%	15%	86	60	19%	386	26%	14%	33%	41%	0.51	0.55	0.53
64	Sri Potti Sriramulu Nellio	52	81%	19%	29%	17%	80	57	9%	262	24%	5%	32%	72%	0.52	0.53	0.53
65	Munger	73	86%	44%	35%	27%	92	73	31%	36	35%	22%	15%	15%	0.66	0.39	0.52
66	West Tripura	66	94%	34%	30%	12%	49	44	7%	30	37%	6%	45%	28%	0.59	0.46	0.52
67	Darjiling	56	98%	58%	34%	21%	34	27	9%	31	21%	5%	39%	26%	0.60	0.43	0.51
68	Madhubani	78	86%	39%	43%	17%	101	71	42%	10	39%	34%	13%	19%	0.61	0.41	0.51
69	North Twenty Four Pargana	58	96%	62%	32%	13%	74	59	7%	198	34%	4%	24%	31%	0.55	0.47	0.51
70	Gadag	92	82%	45%	45%	18%	94	84	15%	0	28%	15%	22%	28%	0.57	0.45	0.51
71	Gopalganj	86	91%	37%	34%	21%	88	65	33%	65	28%	23%	15%	13%	0.53	0.48	0.51
72	Morigaon	98	88%	10%	43%	16%	105	61	28%	108	39%	22%	27%	63%	0.58	0.43	0.51
73	Nagaur	88	92%	28%	32%	16%	78	54	16%	103	28%	13%	21%	90%	0.53	0.48	0.51
74	Gorakhpur	82	78%	24%	30%	23%	74	45	20%	214	15%	16%	21%	18%	0.61	0.40	0.50
75	Rajouri	64	98%	45%	30%	22%	77	56	21%	26	12%	8%	44%	16%	0.53	0.48	0.50
76	Cachar	76	82%	9%	29%	31%	106	71	32%	21	30%	31%	16%	58%	0.51	0.49	0.50
77	Koraput	131	100%	44%	43%	16%	88	45	39%	0	36%	34%	65%	55%	0.61	0.39	0.50
78	Latur	73	85%	27%	43%	18%	96	79	14%	77	31%	6%	22%	34%	0.60	0.40	0.50
79	Jhansi	84	69%	26%	41%	25%	102	80	15%	210	25%	15%	28%	11%	0.57	0.42	0.49
80	Churu	73	88%	36%	27%	16%	76	58	17%	88	28%	17%	23%	82%	0.50	0.49	0.49
81	Saran	73	89%	31%	40%	29%	91	73	33%	97	26%	28%	13%	9%	0.60	0.38	0.49
82	Bulandshahr	105	80%	34%	38%	14%	74	42	25%	226	13%	17%	21%	21%	0.56	0.41	0.48
83	Dharwad	71	98%	25%	45%	17%	91	83	7%	176	18%	6%	14%	24%	0.50	0.44	0.47
84	Pune	50	68%	8%	31%	31%	96	80	4%	287	24%	3%	16%	14%	0.54	0.39	0.47
85	Hugli	50	95%	43%	29%	20%	82	69	11%	25	41%	7%	29%	26%	0.50	0.40	0.45

PROTECTING VULNERABLE CHILDREN Aangan

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