

SOCIAL SECURITY IN THE AGE OF CLIMATE CHANGE: TOWARDS RESILIENCE AND INCLUSION

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ABSTRACT

Natural disasters and slow environmental deterioration are just two of the effects of the growing climate crisis that are upsetting livelihoods, uprooting communities, and driving vulnerable groups farther into poverty. Conventional social security systems, which were largely created for welfare-state or industrial economies, are becoming more and more out of step with the new realities of a world afflicted by climate change. This article examines how the demands on social protection frameworks are changing due to climate change and evaluates how prepared the current systems are to adapt.

It highlights inequalities, innovations, and reform prospects by contrasting India's social security systems with those of nations like Bangladesh, Germany, and Kenya. The study illustrates the disparities in how nations are incorporating climate concerns into their social systems by comparing India, Bangladesh, Germany, and Kenya. Schemes like MGNREGA and PM-KISAN have helped India make strides, but they are still insufficient to address the country's growing climate vulnerability, particularly for internal migrants and informal laborers.

According to the essay, social security policies need to be redesigned to focus on preventive and adaptive measures rather than reactive relief since climate change must be seen as a fundamental socioeconomic risk. It urges a paradigm change from immediate disaster relief to long-term resilience building, stressing the necessity of portable benefits, disbursements related to early warning, and the engagement of communities impacted by climate change in policymaking. By doing this, the study provides a road map for creating welfare systems that are climate-proof and maintain justice, equity, and dignity in the face of environmental instability.

1. INTRODUCTION

Climate change is a current reality that is increasing social and economic vulnerabilities worldwide; it is no longer a threat of the future. Particularly in the Global South, extreme weather events, increasing sea levels, and changing agricultural patterns are having an impact on habitation, food security, employment, and health. Under such circumstances, social security programs—which serve as a lifeline for the weak—must transform

from reactive structures into robust and proactive tools of climate justice.

The stakes are especially high in nations like India, where sizable portions of the populace depend on industries like agriculture and fishing that are sensitive to climate change. It is becoming morally and legally necessary to incorporate climate resilience into social protection as the number of climate migrants rises and ecosystems fail.

Originally designed to manage lifecycle-based risks like old age, disease, and income instability, social security systems are now facing a new class of hazards that are climate-driven, unpredictable, and systemic. These systems are already strained in many nations, especially in the Global South, as a result of disjointed governance, unregulated labor markets, and financial constraints. Millions of vulnerable people will be left exposed and without help as the additional weight of climate change threatens to significantly deepen the gaps in social safety.

In India, for example, more than 90% of the workforce is employed in the informal sector, many in climate-sensitive occupations such as agriculture, fishing, and construction. Climate variability directly affects their livelihoods, yet they remain outside the purview of most formal social security mechanisms. Meanwhile, rural populations face a growing risk of displacement and poverty due to recurrent floods, droughts, and crop failures. The situation is similar in other climate-vulnerable countries, from the deltaic regions of Bangladesh to the arid lands of sub-Saharan Africa. These overlapping vulnerabilities demand that social security systems evolve beyond their traditional frameworks and engage with climate change as a central risk factor.

On the other hand, in response to environmental stress, several nations have started to reconsider the structure of social protection. Early attempts to match welfare with climatic realities are shown in initiatives like Bangladesh's integration of disaster aid inside social safety nets, Germany's Just Transition framework for workers in fossil fuel-based industries, and Kenya's Hunger Safety Net Programme (HSNP). These programs show that social protection that is inclusive, flexible, and forward-thinking is not only feasible but also necessary to promote resilience.

With an emphasis on resilience-building and inclusive design, this essay aims to investigate how nations are—or are not—integrating

climate risk into their social security systems. It examines India's changing social protection scene via a comparative lens, using examples from nations with various socioeconomic and environmental backgrounds. Finding innovative technologies and policy gaps that can guide a more egalitarian and sustainable approach to social security in the era of climate change is the aim.

2. CLIMATE CHANGE AND SOCIAL SECURITY: THE MISSING LINK

Even though there is growing evidence that climate change poses one of the biggest threats to the world's well-being, the majority of social security systems worldwide are still ill-prepared to handle the socioeconomic effects of this phenomenon. Social security has historically been based on clearly defined, predictable life-cycle events, such as disease, old age, unemployment, disability, and death. The foundation of these systems was the presumption of environmental and economic stability, which is no longer the case.

A significant disparity exists between the risks people encounter and the protections they can obtain as a result of social security frameworks' design lacking a climate perspective. The entire nature of risk is changing due to climate change: it is non-linear, transboundary, abrupt and slow-onset, and frequently irreversible. But instead of focusing on long-term resilience and adaptation, many welfare programs continue to be reactive, dispersed, and post-disaster aid oriented.

➤ Loss of Informal Livelihoods and Displacement Caused by Climate Change

Population relocation is one of the most obvious consequences of climate change. Communities are already being forced to relocate both within and across borders, either permanently or temporarily, due to desertification, floods, and rising sea levels. Displaced people, particularly internal migrants, frequently evade the requirements for current social security programs. Benefits are non-portable and

inaccessible to those who are compelled to relocate because the majority of systems are linked to specific geographic locations or official work records.

For example, migration from climate-related misery is increasing in India, particularly in regions like Odisha, Assam, and Bihar. Since they usually lack identification, evidence of residency, or digital literacy, migrant workers who arrive in urban areas are not eligible for even the most basic benefits like ration cards, health insurance, or job guarantees.

➤ **Agricultural Vulnerability and Food Insecurity**

Unpredictable rainfall, degraded soil, and decreased production are all consequences of climate change that are upsetting food systems, especially for smallholder farmers. Conventional income-support programs, such as crop insurance plans or India's PM-KISAN, are not climate-appropriate. The long-term losses brought on by frequent climate shocks or changes in growth seasons are frequently not reflected in them. Furthermore, the majority of crop insurance plans target particular occurrences (such as drought or flood) and hardly ever take into consideration compound climate events or multi-year losses that eventually render farming unfeasible. This undermines rural employment and food security over generations in addition to revenue.

➤ **Health Shocks and Climate-Linked Diseases**

Risks to public health are also being exacerbated by climate change, as rising temperatures make it easier for vector-borne illnesses like dengue, chikungunya, and malaria to spread. Heat waves, air pollution-related respiratory problems, and mental health disorders associated with displacement are all on the rise. But current health insurance plans hardly ever take these changing risks into consideration.

For instance, the Ayushman Bharat program in India prioritizes secondary and tertiary care

over preventative care and diseases that are susceptible to climate change. Similarly, there is a lack of infrastructure and knowledge regarding the long-term health effects of climate exposure, especially in rural and tribal areas.

➤ **Gendered Impacts and Social Exclusion**

The intersection of climate change and social inequality also has gendered implications. Women, especially in rural and low-income households, often bear the burden of care giving during climate crises, face food insecurity first, and are more likely to be excluded from land titles and asset ownership—criteria that frequently determine access to social security benefits. Yet, very few social protection systems explicitly address the gendered dimensions of climate vulnerability.

➤ **Urban Vulnerability and Climate Risk in Informal Settlements**

Unplanned growth, heat island effects, and inadequate infrastructure are making urban areas—especially in poorer nations—hotspots for climate danger. In nations like India, a sizable section of the urban population lives in informal settlements, which are particularly susceptible to heat waves, flooding, and water scarcity. Residents are very vulnerable but mainly invisible to social protection systems because they frequently lack access to public healthcare, clean water, sanitation, and formal housing rights.

3. GAPS IN SOCIAL SECURITY SYSTEMS

Despite their importance, current social protection mechanisms often fall short in addressing climate-induced risks. Key challenges include:

- **Limited Coverage:** Informal workers, who make up more than 60% of the global labor force, are not covered by the majority of social safety programs. These workers' erratic salaries, lack of health insurance, and precarious living situations make them more susceptible to environmental shocks. They suffer greatly during climatic disasters

because they lack access to safety nets and social insurance.

- **Inflexibility:** Generally speaking, current social protection programs are intended for static beneficiary profiles and predictable hazards. Climate events, however, are dynamic and can have a range of effects. Help frequently comes too late or not at all due to strict qualifying requirements and sluggish response processes, which ignore urgent and changing needs.
- **Underfunding:** Many developing nations lack the financial resources necessary to modify or expand their social safety schemes. Budgetary restrictions restrict the scope and sufficiency of benefits, especially when needs are at their highest during climate-related calamities. Furthermore, competition for resources frequently pushes climate adaptation strategies to the back burner.
- **Lack of Coordination:** Adaptation to climate change and social protection are frequently managed by different organizations with little interaction. This fragmentation leads to service gaps or duplication of effort and makes it difficult to create cohesive, multifaceted strategy. Building comprehensive resilience requires effective cross-sector coordination.
- **Lack of climate risk integration:** Environmental indicators, risk evaluations, and climatic data are not typically included in social security systems. Their capacity to proactively target vulnerable populations or regions at risk from climate dangers is limited by this omission. Programs frequently just address economic poverty without taking climate sensitivity into consideration, which lessens their impact in areas that are vulnerable.

Furthermore, social protection programs' capacity to foresee and respond to climate-related problems is limited by the infrequent

integration of climate risk assessments. Programs that only provide economic support, for example, can overlook the need for house rebuilding, relocation aid, or community-level resilience projects.

4. REDEFINING SOCIAL SECURITY FOR A CLIMATE- RESILIENT FUTURE

To meet the challenges of climate change, social security must be re imagined as a dynamic tool for resilience-building. This involves:

- **Expanding Universal Coverage-** It is crucial to have a universal social protection level that guarantees access to basic services and a secure basic income. These ought to include channels for connecting with displaced people, migrants, indigenous communities, rural residents, and informal laborers. Community-based registries, mobile devices, and national ID systems can improve outreach and targeting.
- **Integrating Climate Risk Management-** To more effectively target vulnerable groups and locations, social security systems should integrate risk mapping and climate data. Proactive actions can be guided by data on danger exposure, climate projections, and early warning systems. Planning that is risk-informed aids in coordinating the provision of social protection and catastrophe preparedness.
- **Developing Adaptive Programs-** During climatic emergencies, initiatives that are scalable and adaptable, such shock-responsive cash transfers can be deployed. Index-based insurance plans for weather, livestock, or crops can reduce income loss and stop bad coping mechanisms like taking kids out of school or selling assets.
- **Promoting Sustainable Livelihoods-** It is possible to promote long-term adaptation and lessen reliance on

emergency relief by tying social protection to climate-smart livelihood initiatives like afforestation, renewable energy employment, retraining for green jobs, or support for climate-resilient agriculture. Goals for climate adaption and ecosystem restoration should be included in public works initiatives.

- Ensuring Gender Responsiveness- Due to their caregiving responsibilities, lack of financial ownership, and isolation from decision-making, women frequently face increased risks. Gender inequities must be addressed via climate-responsive social security through inclusive program design, child care assistance, and customized benefits.

5. CASE STUDIES- INNOVATIVE APPROACHES

- Ethiopia's Productive Safety Net Programme (PSNP) - One of Africa's biggest social protection programs, PSNP was introduced in 2005. It provides seasonal food or cash distributions to households that are food insecure. The way PSNP integrates with climate adaptation is unique; beneficiaries take part in public works projects that create community assets like soil bunds, water harvesting structures, and reforestation initiatives. These strengthen communities' resistance against future droughts and food instability while also benefiting local ecosystems.
- Philippines' Risk Resiliency Program- the Philippines' Risk Resiliency Program (RRP) aims to increase vulnerable communities' ability to manage the risks of disasters and climate change. By providing impoverished households with conditional cash transfers that require involvement in ecological restoration projects like mangrove rehabilitation, watershed preservation, or urban greening, it blends social protection with environmental conservation. This

concept fosters both environmental responsibility and monetary assistance.

- Germany's Climate Insurance Initiative- the InsuResilience Global Partnership, which seeks to insure vulnerable populations in developing nations against climate risk, has had Germany as a major backer. For instance, index-based insurance plans provide immediate financial support following weather-related disasters in nations like Bangladesh and Kenya, accelerating community recovery. These programs enable people to take proactive steps to mitigate risk and lessen the financial load on governments.
- India's Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) - Rural households are guaranteed 100 days of paid employment every year under MGNREGA. The creation of climate-resilient assets, such as farm ponds, check dams, afforestation, and land development, has received more attention in recent years. This improves rural India's ecological infrastructure while simultaneously ensuring livelihood stability during hard times. MGNREGA serves as an example of how employment initiatives can be matched with the goals of climate adaptation.

These examples illustrate the potential of integrated models to enhance both social and environmental resilience and underscore the importance of adaptive design in social security systems.

6. POLICY RECOMMENDATIONS

- Institutionalize Climate Responsive Planning- Instead than reacting to disasters after they happen, social protection systems need to proactively include climate risk factors into their policy frameworks. This entails mapping hazard-prone locations, assessing susceptibility,

and forecasting hazards using climate models. Interagency task teams that incorporate climate adaptation into welfare programs ought to be established by governments. Targeting can be enhanced, for instance, by establishing eligibility requirements that take into account both environmental exposure and economic position. Every new social protection policy should be subject to a climate impact review as a matter of law.

- Ensure Inclusivity and Equity– Prioritizing the most vulnerable—such as those employed in the unorganized sector, members of indigenous communities, women, the elderly, people with disabilities, and refugees from climate change—must be made clear. This necessitates removing structural and administrative obstacles to entry, such as discriminatory standards or a lack of documentation. To target underprivileged groups, governments might make use of grievance redress procedures, community-based registers, and mobile registration units. No one is left behind during emergencies or recovery operations thanks to customized support, such as childcare benefits for women or mobility assistance for the disabled.
- Strengthen Infrastructure and Delivery Mechanisms– For social protection to be delivered in a timely and effective manner, a strong physical and digital infrastructure is essential. Even in rural or disaster-affected areas, investments in digital ID systems, mobile banking, biometric verification, and geospatial data tools can expedite the delivery of benefits. The creation of dispersed

service centres that can function and react rapidly during climatic catastrophes is equally crucial. Program continuity during disruptions is improved by the construction of climate-resilient infrastructure, such as community centres that can withstand flooding or storage hubs that can withstand drought.

- Build Local Capacity and Knowledge– During climatic disasters, frontline social workers and local officials are frequently the first to arrive on the scene. It is essential that they receive training in community participation, adaptive program design, and climate literacy. Governments ought to provide funding for regional workshops, build toolkits, and establish educational opportunities among areas dealing with comparable climate issues. In order to mobilize grassroots support and uphold trust, capacity building also applies to cooperatives, community-based organizations, and traditional leaders.

CONCLUSION

The most vulnerable communities worldwide are now being impacted by climate change, which is no longer a hypothetical threat. The necessity of strong, flexible, and inclusive social protection systems is becoming more and more obvious as environmental stressors become more severe and unexpected. Social security needs to change to handle new risks associated with climate change in addition to more conventional economic weaknesses. Social protection that incorporates climate resilience presents a special chance to end the cycle of poverty, lessen inequality, and provide communities the tools they need to recover and prosper. In order to promote frameworks that are not merely reactive but also preventative and transformative, governments and international organizations must acknowledge

the interconnectedness between social protection and climate policy. We can guarantee that social protection acts as a first line of defence against climate shocks by integrating fairness, sustainability, and innovation into the design of policies.

In the end, the shift to a future that is climate resilient depends on our capacity to rethink and strengthen social security institutions in order to address the issues of the present and the future. Everyone can have a fair and secure future with political will, focused investment, and inclusive governance.

REFERENCES

Books

1. Ghosh, Jayati. *The Making of a Catastrophe: The Impact of COVID-19 on the Indian Economy and Society*. HarperCollins India, 2022.
2. Khosla, Radhika, Navroz K. Dubash, and Ankit Bhardwaj, eds. *Climate Change and India: Vulnerability, Resilience and Adaptation*. Cambridge University Press, 2022.
3. Drèze, Jean, and Reetika Khera. *Social Security in India: Emerging Trends and Debates*. Oxford University Press, 2017.
4. Madhanagopal, Devendraraj, and Salim Momtaz, editors. *Climate Change and Risk in South and Southeast Asia: Sociopolitical Perspectives*. 1st ed., Routledge, 2022.
5. PressReader.com – Digital Newspaper & Magazine Subscriptions [Internet]. Pressreader.com. PressReader; 2025 [cited 2025 Apr 12]. Available from: https://www.pressreader.com/india/the-sunday-guardian/20241117/282084872339329?srsId=AfmBOopnTcyfG_Y_1Eiw-FyfNH0pz9Pbm7kgcP_Wwsc4tQ63sZFaWGyl
6. Reuters. Extreme heat triggers novel payout for 50,000 women in India [Internet]. ThePrint. theprint; 2024 [cited 2025 Apr 12]. Available from: <https://theprint.in/india/extreme-heat-triggers-novel-payout-for-50000-women-in-india/2127685/>
7. Costella C, Maarten van Aalst, Yola Georgiadou, Slater R, Reilly R, McCord A, et al. Can Social Protection Tackle Risks Emerging from Climate Change, and How? a Framework and a Critical Review. SSRN Electronic Journal. 2022 Jan 1;
8. Social security response to climate change and environmental degradation [Internet]. International Social Security Association (ISSA). 2023. Available from: <https://www.issa.int/analysis/social-security-response-climate-change-and-environmental-degradation>
9. Costella C, van Aalst M, Georgiadou Y, Slater R, Reilly R, McCord A, et al. Can social protection tackle emerging risks from climate change, and how? A framework and a critical review. *Climate Risk Management*. 2023 Mar;40:100501.