COMMENTARY

Inequality Makes a Low-carbon Transition and Climate Resilience Incompatible

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1. INTRODUCTION

The year 2025 ended with the publication of three significant documents relating to humanity's greatest challenges: the *2025 Global Multidimensional Poverty Index* (MPI), the *Climate Inequality Report 2025*, and the COP30 decision on the *Global Goal on Adaptation* (GGA), elaborating on indicators to track progress on climate change adaptation. Together, these three documents underscore a crucial global policy conundrum: climate policy is inseparable from development policy, eradication of poverty lies at the core of climate-resilient development, and addressing inequality is essential to bridge the gap between climate policy and development policy. From a normative perspective, these reports essentialize the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR–RC) in terms of Article 4.7 of the *United Nations Framework Convention on Climate Change* (UNFCCC 1992). Article 4.7 unequivocally asserts that poverty eradication and social and economic development are the overriding priorities of developing countries. No credible path to climate resilience is possible if these priorities are ignored.

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2. POVERTY ERADICATION AND CLIMATE RESILIENCE: ANATOMICAL TWINS

Poverty and climate change are intimately connected, as people living in poverty—particularly in developing countries—are more exposed to climate extremes and least capable of absorbing shocks, which pushes them deeper into poverty. According to the global MPI 2025, out of 1.1 billion people living in acute poverty, 887 million experience at least one of four extreme climate hazards (extreme heat, floods, drought, and air pollution), and 309 million suffer compounded deprivations due to intersecting social vulnerability and exposure to 3–4 overlapping hazards (OPHI and UNDP 2025). Sub-Saharan Africa and South Asia are home to nearly 83.2% of the world's multidimensionally poor people. These regions also have the largest numbers of poor people living in subnational regions affected by climate hazards (380 million and 344 million, respectively). The MPI also underscores why income-based poverty reduction approaches are inadequate. For example, despite a dramatic reduction in income poverty in India in the last two decades, about 16.4% of India's population (nearly 23.5 crore people) is multidimensionally poor (OPHI and UNDP 2025).

As climate extremes become more frequent and intense in the coming decades, multidimensional poverty is likely to intensify, particularly in vulnerable regions such as Africa and South Asia. In the absence of adequate response measures, nearly 118 million Africans living in extreme poverty (i.e., living on less than US$ 1.90 per day) will be exposed to climate extremes such as droughts, floods, and extreme heat (WMO 2024). For a continent with a high debt burden, limited fiscal space, and a large vulnerable population, this frequent exposure to climate extremes would lead to a rise in poverty and destitution. In other words, poverty eradication will become an even greater challenge in the future due to climate change, while the goal of climate resilience will recede.

The mutually reinforcing relationship between climate risk and deprivation reflects the fact that extreme weather events often push transiently non-poor households back into poverty[1] and explains why MPI-adjusted climate resilience should inform the implementation of the GGA, with a focus on targeted adaptation finance, social protection, and infrastructure upgrades. There is a strong need for greater synergy between climate action and poverty alleviation strategies. Poverty reduces adaptive capacity; therefore,

[1] The COVID-19 pandemic has already pushed millions of people into poverty, with the process of poverty eradication having stagnated globally due to conflicts and slower growth. Most donor countries have scaled back their development aid budgets, reversing decades of progress in poverty alleviation.

holistic strategies that provide income and livelihood support, build socio-economic resilience, reduce dependence on natural resources, and improve infrastructure will reduce climate vulnerability. Similarly, climate action must also ensure social and economic equity; otherwise, a low-carbon pathway might actually increase vulnerability. There are several cases where climate interventions have harmed vulnerable populations. For instance, flood mitigation interventions in Dhaka, Manila, and New Orleans displaced millions of people, while private property development flourished along vulnerable waterfronts, flood flow zones, and floodwater retention areas (Bouyé and Waskow 2021).

To avoid scenarios in which climate action harms disadvantaged populations, climate interventions must be specifically directed towards low-income and marginalized groups, especially children. Children not only bear the greatest risks, they also bear the highest burden of multidimensional poverty. About 27.8% of all children live in multidimensional poverty, more than double the share of adults (OPHI and UNDP 2025). Children are also among the most vulnerable groups when it comes to the impacts of climate change and air pollution. Therefore, without a child-centric approach to climate action, millions of children will be at risk of poor health and educational outcomes due to water scarcity, extreme weather events such as floods and droughts, and breakdown of public services and infrastructure—which, in turn, will adversely impact their future and intensify poverty.

3. WEALTH INEQUALITY AND THE PARIS AGREEMENT

Despite straining under the twin burdens of poverty and climate change, vulnerable populations have a minimal influence on development and climate policy planning. Their lack of influence in decision-making essentially stems from their lack of economic and political power. In contrast, the rich—who are the main contributors to climate change through their excessive consumption and wealth—are far less vulnerable to climate extremes and also possess the financial and political capacity to finance climate action. According to the *Climate Inequality Report 2025*, the wealthiest 1% globally account for 15% of total consumption-based emissions. Their role in the climate crisis is even greater when we consider their avenues of wealth generation—i.e., their role as shareholders in polluting industries. They account for 41% of global emissions associated with private capital ownership. The report warns that without corrective policy actions, this class could see their share of global wealth rise from

38% to 46% by 2050 as they accumulate ownership of clean assets, thereby deepening inequality even as overall emissions fall.

These estimates point to a grave lacuna in the scope of the Paris Agreement (2015). The Agreement's temperature-reduction goal is further qualified by the additional objectives of achieving a transition to a low-carbon, climate-resilient economy. A transition to a low-carbon state that is accompanied by rising wealth inequality will make it impossible to achieve climate resilience. The fact that the Paris Agreement (and subsequent decisions around its implementation) does not address wealth inequality exposes a fundamental structural flaw in global climate cooperation. At most, this has been partially addressed by imposing financial support obligations on rich countries. However, the *Baku to Belem Roadmap to 1.3T* to mobilize climate finance—US$ 1.3 trillion per year by 2035 for developing countries from all sources—does not address wealth inequality either. Hence, it is highly likely that the next three years of deliberations on climate finance will also bypass this critical aspect. The warning is clear: global inequality is not only a major driver of climate change but also of higher poverty rates in the future. Without addressing inequality, the world may move towards a low-carbon future, but it is unlikely that it would be climate resilient.

4. EQUITY AND THE GLOBAL GOAL ON ADAPTATION (GGA)

Recognizing that wealth confers both the means to act and the power to influence policy, the proposal by the *World Inequality Report* (WIR) 2025 (Chancel *et al.*, 2025) to tax the carbon content of wealth to finance climate action aligns with efforts to operationalize CBDR–RC not just across nations, but also across ownership classes whose investments shape global emissions trajectories. A similar suggestion, although based solely on income distribution, was made by a Greenhouse Development Rights (GDR) report in 2009, which found that high incomes were primarily concentrated in OECD countries (Baer *et al.* 2009). Given that both income and wealth inequality have risen significantly over the past decades, a similar pattern is likely to impact the WIR proposal. It will only be partially effective if the GGA implementation is not adequately aligned with reducing income and wealth inequality.

The MPI and WIR reports converge on a core truth: climate policy must address the differentiated realities of exposure, adaptive capacity, and responsibility. The CBDR–RC was developed to ensure common responsibility under divergent development trajectories, embedding equity into climate obligations. COP 30's adoption of the Belém Adaptation Indicators—59 voluntary, non-prescriptive metrics spanning water, food,

health, ecosystems, infrastructure, and livelihoods, and cutting across finance, technology, and capacity-building—offers a way to track progress towards the GGA. However, these indicators do not engage with inequality as a structural challenge to adaptation, despite the fact that the MPI and GGA both focus on the same sectors (health, water, infrastructure, etc.) for policy interventions.

The GGA indicators are voluntary tools, but their effectiveness hinges on whether they account for multidimensional deprivation and localized hazard exposure—the approach put forth by the MPI. A resilient metric regime would track, for example, the share of households transitioning to clean cooking fuels, improvements in sanitation coverage, reductions in child malnutrition, and increased access to reliable electricity—all core MPI indicators—alongside climate-specific measures such as coverage under a heat action plan, flood-resilient housing upgrades, drought-proofing of agricultural systems, and air-quality improvements in high-particulate-matter regions. In climate vulnerability hotspots, where heat stress and flooding coexist, adaptation metrics should capture the adoption of cool roofs and urban shade, flood-resilient roads, early warning systems, and school continuity plans, while poverty-sensitive measures should track how these investments lower MPI deprivation scores.

To sum up, the MPI and WID reports provide empirical context for revisiting the GGA indicators and implementation strategies. Given that countries will test the GGA indicators in the years ahead, it is imperative that the discussions remain grounded in the findings of the MPI and the WID. Otherwise, the world risks missing the bus to climate resilience—if it has not done so already by ignoring adaptation for so long.

Ethics Statement: This study complies with appropriate ethical requirements for the conduct of this research.

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