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THE GLOBAL "MUTIRÃO": A NEW HOPE FOR CLIMATE CHANGE SOLUTIONS OR ANOTHER HOAX

Abstract

The concept of Global "Mutirão" has emerged as a potential framework for addressing climate challenges through coordinated global action. Unlike traditional top-down climate governance mechanisms, the "Mutirão" framework promotes participatory decision-making, knowledge sharing, and locally driven initiatives that can strengthen resilience and enhance the effectiveness of climate action. The approach has the potential to strengthen climate action efforts by fostering collective responsibility, shared resources, and coordinated implementation of sustainable climate strategies. Bangladesh, being one of the most climate-vulnerable countries, could benefit significantly from the Global "Mutirão" approach, as it aligns closely with its long tradition of community-based cooperation and climate resilience initiatives. Through a Mutirão-style framework of collective global action, Bangladesh can strengthen collaboration between government institutions, local communities, international organisations, and civil society to address climate challenges more effectively. The article critically examines, using both primary and secondary data, whether the Global "Mutirão" represents a genuinely transformative pathway for climate solutions or merely another rhetorical construct in the evolving discourse of climate governance. However, the findings reveal that while the Global "Mutirão" offers a promising vision for collective climate action grounded in solidarity and cooperation, its effectiveness will depend on establishing concrete governance structures, ensuring inclusive participation and sustaining political commitment at both national and international levels.

Keywords: COP30, Mutirão, UNFCCC, Kyoto Protocol, Paris Agreement, Community-based Adaptation

"One of the goals of the "Mutirão" is to create a global movement that integrates local actions" - André Aranha Corrêa do Lago, COP30 President-Designate[1]

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[1] "Second letter from the COP30 Presidency moves from vision to action with details on the call for a "global

1. Introduction

The global climate crisis is a complex and interconnected challenge in the 21st century, which is driven largely by human-induced greenhouse gas (GHG) emissions, leading to rising temperatures, sea-level rise, extreme weather events, and ecological disruption. According to the Intergovernmental Panel on Climate Change (IPCC), global warming has already risen by about 1.0°C above pre-industrial levels and may reach 1.5°C between 2030 and 2052, if current trends continue.[2] Apart from environmental impacts, climate change is increasing inequality, displacement, and geopolitical instability, making it a major socio-economic and justice issue. International efforts under the United Nations Framework Convention on Climate Change (UNFCCC), particularly through the Paris Agreement which established the 1.5°C temperature goal, established key frameworks such as Nationally Determined Contributions (NDCs)[3], and a five-year ambition "ratchet"[4] system. It also formally recognised the importance of addressing loss and damage, and a dedicated Loss and Damage Fund was later established through decisions adopted at COP27 and subsequently operationalised at COP28. Agreements like the Kyoto Protocol and the Paris Agreement have not achieved the necessary emission reductions, largely due to weak enforcement, a lack of political will, and inequities in global governance. However, these negotiations have struggled to translate commitments into effective actions. Global emissions continue to rise, climate finance promises have often fallen short and the voluntary nature of the Paris framework limits enforcement. While climate diplomacy has built essential governance structures, it has yet to deliver emission reductions at the speed and scale required to meet global climate targets. Despite institutional achievements, global emissions continue to rise, and climate finance commitments remain insufficient. The crisis, therefore, reflects not just an environmental problem, but a failure of collective political action and accountability at the global level. Overall, there is a significant gap between policy ambitions and actual implementation.

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mutirão" against climate change," COP30 Brasil Amazonia, accessed December 20, 2025, https://cop30.br/en/news-about-cop30/second-letter-from-the-cop30-presidency-moves-from-vision-to-action-with-details-on-the-call-for-a-global-mutirao-against-climate-change.

[2] Valérie Masson-Delmotte et al, eds, *Global Warming of 1.5°C* (Cambridge, UK: Cambridge University Press, 2022), 3-24.

[3] The Paris Agreement requests each country to outline and communicate their its post-2020 climate actions according to their its national capacities, known as their its Nationally Determined Contributions (NDCs). For more details, United Nations Climate Change, "Nationally Determined Contributions (NDCs)," https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs.

[4] The "Ratchet" mechanism (or ambition mechanism) in climate negotiations is a Paris Agreement framework requiring countries to submit increasingly ambitious Nationally Determined Contributions (NDCs) every five years. It ensures that each new set of climate pledges is more stringent than the last, aimed at achieving long-term net-zero goals. For more details, Sophie Yeo, "Explainer: the 'ratchet mechanism' within the Paris climate deal," Carbon Brief, accessed March 3, 2026, https://www.carbonbrief.org/explainer-the-ratchet-mechanism-within-the-paris-climate-deal/.

The concept of the Global "Mutirão" entered into the international climate discourse as Brazil used the term to frame climate negotiations as a collective global effort that mobilises governments, civil societies, indigenous communities, and the private sector. The idea emphasises cooperation to accelerate the implementation of the Paris Agreement, bridge the gap between climate pledges and real action, and incorporate indigenous knowledge and community-based solutions. It also promotes a more inclusive and participatory approach to climate governance, recognising that addressing climate change requires coordinated action across multiple actors. Overall, although "Mutirão" is an ancient tradition of collective work, its use as a guiding philosophy for international climate action is a recent initiative advocated by Brazil in the run-up to the Conference of the Parties 30 (COP30). Although the idea of "Mutirão" is not new, its inclusion in climate change solutions is. The concept is a traditional term and practice within the indigenous community over the centuries, adopted by the Brazilian Presidency of the COP30 to encourage a new, more collaborative and inclusive approach to global climate action.

The "Mutirão" framework is particularly significant for developing climate-vulnerable countries like Bangladesh, as, despite contributing minimally to global warming, they are exposed to its adverse impacts. In climate negotiations, Bangladesh has successfully established itself as a voice of the climate-vulnerable Least Developed Countries (LDCs) and as a proactive leader advocating for urgent climate action, including adaptation, mobilising its own climate finance, and advancing loss and damage initiatives. Although the country relies heavily on international cooperation, financial support, technological transfer and equitable global partnership to overcome climate change-induced challenges, Bangladesh has also demonstrated a remarkable role in domestic mobilisation for disaster risk reduction, community-based adaptation and social resilience, which can be categorised as "Mutirão". The concept of the Global "Mutirão" has become both normative and practical calling for a collective global response grounded in climate justice, shared accountability and inclusive climate governance.

As there were issues related to reliance on consensus, delayed actions, weak or very low enforcement mechanisms and disputes between developed and developing countries over accountability, the global climate negotiations have not seen much success earlier. These issues have also been exacerbated by competing national interests, a lack of consensus among participating states, and the role of lobbyists. Through the Kyoto Protocol and the Paris Agreement, countries agreed to reduce greenhouse gas emissions. Over the last several decades, governments have collectively pledged to slow global warming, but despite intensified diplomacy, the world is already facing the consequences of climate change, which are expected to get worse and the amount of CO_2 in the atmosphere has continued to rise, heating

the earth at an alarming rate.[5] The basic failure of climate negotiations to implement decisions indicates a persistent gap between ambition, decision and action, prompting global climate governance stakeholders to introduce the new concept of "Mutirão".

Against this background, the present paper aims to examine whether the new idea of a Global "Mutirão" for climate change solutions will offer better opportunities to address its adverse impacts. The article examines how the concept differs from previous climate change mechanisms and how Bangladesh could benefit from the positive effects of the new concept of Global "Mutirão". The present study is qualitative and uses both primary and secondary data. To gather information about the Global "Mutirão", secondary sources, including books, journal articles, policy documents, reports, and newspapers, have been consulted. In addition, Key Informant Interviews (KIIs) with pertinent stakeholders have also been conducted to gather primary data and corroborate information gathered from secondary sources.

The paper is divided into five sections. After the introduction in the first section, the second section focuses on the perception of the Global "Mutirão", while the third section deals with the normative foundations and principles of the concept of the Global "Mutirão". The fourth section highlights the climate actions of Bangladesh, which can be considered as a "Mutirão" in Practice. The fifth section concludes the paper.

2. The Global "Mutirão": The Perception

The term "Mutirão" originated from the indigenous Tupi-Guarani language of Brazil, meaning "working together," or "collective work," or "communal efforts" for a specific purpose or project to accomplish a shared goal.[6] In the rural areas of Brazil, "Mutirão" is a significant cultural practice and self-organised mobilisation in which people assemble to work on projects such as building houses, restoring lands, planting and harvesting crops, or celebrating festivals, which seems to strengthen community bonding and foster a sense of shared responsibility and the work is done through collective efforts.

The notion of "Mutirão" represents an "ancestral wisdom" or "social technology" which transforms individual efforts into collective ones. The concept is highlighted in the 2025-2026 international climate action and sustainability

[5] Council on Foreign Relations, "Paris to Kyoto: The History of UN Climate Agreements," accessed January 9, 2026, https://www.cfr.org/backgrounders/paris-global-climate-change-agreements.
[6] AWMA, "Mutirão at COP30: "Working Together" (November 21)," Air & Waste Management Association, acceded January 7, 2026, https://www.awma.org/blog_home.asp?Display=194#:~:text=It's%20a%20tradition%20where%20people,"%20or%20"collective%20work".

agenda, applied to local community-based projects and disaster management and recovery. The concept is considered as the cornerstone of the COP30 and signifies a shift towards inclusive, rapid action that bridges local grassroots initiatives with international, multisectoral cooperation to keep the 1.5°C goal achievable.

The Brazilian Presidency has adopted the term as the core theme for COP30, as a metaphor for a global, decentralised, and bottom-up approach to cooperation to combat the climate crisis. COP30, marking the tenth anniversary of the Paris Agreement, recognises progress, including strengthened NDCs, adaptation plans, transparent reporting, and rapid growth in renewable energy, while warning that current emission trajectories remain insufficient to keep the 1.5°C target within reach. The concept recognises the necessity of urgent action and support to achieve a deep, rapid and sustained reduction in GHG emissions that aligns with the Paris Agreement target and points to finance, capacity-building and technology transfer as the critical enablers of climate action.[7]

The COP30 decision commits to bringing together collective efforts in a global "Mutirão" to confront climate change, urging all stakeholders to collaborate to rapidly accelerate and expand climate action worldwide. This mobilisation aims to strengthen international cooperation and implementation throughout this decisive decade, in order to keep the 1.5°C goal within reach, enhance resilience, and scale up finance, technology transfer, and capacity-building, consistent with the principles and provisions of the Paris Agreement. Emphasising urgent, deep, and sustained emission reductions, scaled-up finance (targeting at least US$ 1.3 trillion annually for developing countries by 2035), and stronger support for adaptation and loss and damage, the Presidency calls for accelerated implementation during this critical decade. Through initiatives like the "Global Implementation Accelerator"[8] and the "Belém Mission to 1.5"[9], the decision seeks to unite governments, financial institutions, civil societies, and other stakeholders in a cooperative global "Mutirão" to enhance ambition, mobilise resources, and ensure climate-resilient, low-emission development consistent with equity and sustainable development.[10]

[7] United Nations Framework Convention on Climate Change, "Global Mutirão: Uniting humanity in a global mobilization against climate change," accessed December 15, 2025, https://unfccc.int/sites/default/files/resource/cma2025_L24E.pdf.

[8] The Global Implementation Accelerator (GIA) is a voluntary, collaborative initiative launched at COP30 to help countries rapidly mobilise public, private, and philanthropic resources to execute their national climate plans, specifically NDCs and NAPs. It serves as a platform to accelerate proven climate and sustainability solutions, overcoming regulatory, technical, and financing barriers to advance global goals like the Sustainable Development Goals. For more details, Global Implementation Accelerator, "Definition," accessed March 5, 2026, https://news.sustainability-directory.com/news/global-implementation-accelerator/.

[9] The Belém Mission to 1.5 translates the Paris Agreement's 1.5°C target into concrete regional or sectoral actions, promoting high-level commitment to rapid decarbonization and ecological protection. For more details, Belém Mission to 1.5, "Definition," accessed March 8, 2026, https://news.sustainability-directory.com/news/belem-mission-to-1-5/.

[10] Based on United Nations Framework Convention on Climate Change, "Global Mutirão: Uniting humanity".

Figure 1: The Global "Mutirão" for climate change solutions[11]

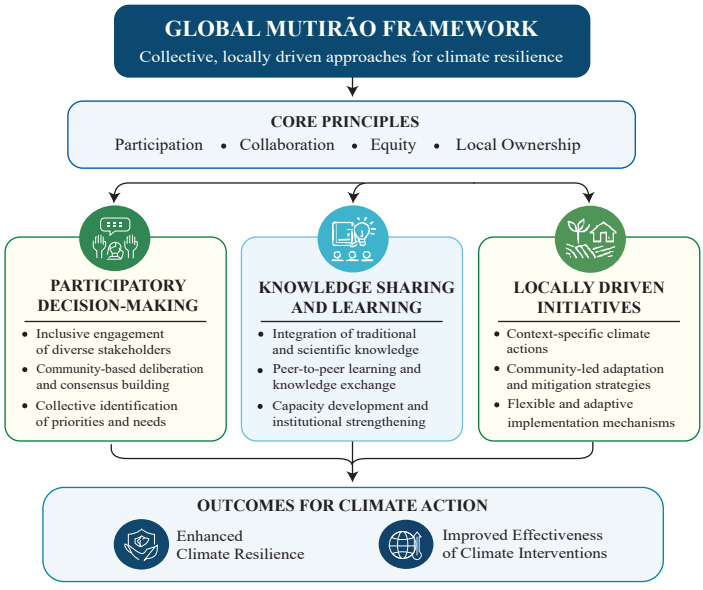


Figure 1 illustrates the role of the Global "Mutirão" in advancing collaborative climate actions. The Global "Mutirão" framework promotes participatory decision-making, knowledge sharing and locally driven initiatives that strengthen resilience and enhance the effectiveness of climate action. The figure emphasises the dynamic nature of the framework with the core principles of participation, collaboration, equity and local ownership, which enable participatory decision-making, knowledge sharing and locally driven initiatives for enhanced climate resilience and improved effectiveness of climate interventions.

The vital role and active participation of non-party stakeholders, including civil society, private sector, financial institutions, local authorities and communities including women, youth, children, and research institutions, have also been emphasised in supporting parties and driving meaningful collective progress towards the long-term goals of the Paris Agreement. It also put emphasis on strengthening climate response, raising ambition, and advancing implementation through related intergovernmental processes.[12]

The "Mutirão" framework has shifted the focus from theoretical discussions to immediate, concrete, and urgent actions, like tackling extreme heat

[11] *Ibid*
[12] *Ibid*

and deforestation, to safeguard communities and ecosystems.[13] At the same time, the concept reimagined multilateralism as dynamic, action-oriented cooperation. It fostered spaces for dialogue, trust-building, and collaborative problem-solving mechanisms, moving beyond adversarial approaches to cultivate a living ecosystem of solutions capable of delivering impact at scale.[14] It has also emerged as a vital 'bottom-up' approach to climate action at COP30, following the failures and limitations of the existing formal international negotiations. The United Nations (UN) climate negotiations have been mired in deep divisions; however, the concept of "Mutirão" focuses on accelerating implementation through non-party stakeholders, local communities, and private partners, providing a necessary, practical, and inclusive path forward. As per the KIIs, there are many considerations regarding the decision on the Global "Mutirão", which are more focused on adaptation at the cost of undermining mitigation, and this approach can be better utilised for specific resources, such as preserving forests.[15]

The UNFCCC mentioned that the draft decision titled *Global Mutirão: Uniting Humanity in a Global Mobilization against Climate Change*" or CMA 7 calls for an urgent, whole-of-society acceleration of climate action to close the widening gap between current national commitments and the 1.5°C target. Framed around solidarity and collective responsibility, it proposes a "Global Implementation Accelerator" to strengthen mechanisms for mitigation, adaptation, climate finance, and loss and damage. The decision reinforces the transition away from fossil fuels and alignment of financial flows with low-emission and climate-resilient development. Overall, it shifts emphasis from pledge-making to implementation-focused multilateral cooperation amid growing geopolitical uncertainty.[16] At COP30, the Brazilian Presidency advanced the idea of the Global "Mutirão", which frames climate action as a continuous, collective mobilisation inspired by Brazilian and indigenous traditions of shared labour. It functions both as a method, like structuring dialogue, social participation, and multisectoral cooperation, and as an ethos, encouraging solidarity, shared responsibility, and implementation-focused engagement under the Paris Agreement. The "Mutirão" approach emphasises the integration of global governance with local actions that value traditional knowledge, territorial memory, and community-based solutions alongside formal multilateral processes.[17]

[13] "Brasil launches global call for a 'mutirão' against climate change," COP30 Brasil Amazonia, accessed March 1, 2026, https://COP30.br/en/news-about-COP30/brazil-launches-global-call-for-a-mutirao-against-climate-change.
[14] "Mutirão COP30," COP30 Brasil Amazonia, accessed March 1, 2026, https://COP30.br/en/mutirao-COP30.
[15] Information collected from KIIs.
[16] United Nations Framework Convention on Climate Change, "Global Mutirão: Uniting humanity".
[17] "Mutirão COP30," COP30 Brasil Amazonia.

The UN Environment Programme Finance Initiative (UNEP FI) marked COP30 as a transition from negotiation to implementation and noted that the adoption of the Global "Mutirão" within the Belém Package, as the central outcome, recognised the need for accelerated implementation of the Paris Agreement.[18] Yossi Mekelberg has focused on the growing scepticism about the efficacy of annual COP negotiations, as critics argue that the agreements are often diluted during implementation; as such Brazil has proposed a new mobilisation framework based on "Mutirão", which emphasises sustained cooperation beyond formal negotiations, aiming to transform climate governance from episodic deal-making to long-term implementation.[19] Kristian Noll described the "Mutirão" concept for COP30 as a unique opportunity to consider how faith communities and religious narratives can contribute to the development of international climate policy. He noted that the Global "Mutirão" approach challenges traditional climate governance by integrating diverse knowledge and creative solutions, with faith communities playing a key role: providing moral guidance, bringing diverse stakeholders together, and taking concrete climate actions such as investment and sustainability initiatives.

At the same time, the success of the approach depends on sustaining a whole-of-society approach, with faith actors helping shape inclusive and effective international climate policy.[20] Linda Kalcher has noted that COP30 in Belém culminated in the adoption of the Global "Mutirão" decision, signalling continued multilateral cooperation on climate action despite geopolitical tensions and the withdrawal of the United States from the Paris Agreement. The summit marked a shift from negotiation-centred diplomacy towards implementation-focused cooperation, emphasising that climate action aligns with countries' economic and strategic self-interest.[21] Dr Emel Akçalı has highlighted that the world order is no longer based on the hierarchy of global actors or the divisions between "developed" and "developing" states.[22]

Alexandre Padilha and Tedros Adhanom Ghebreyesus described the COP30 as more than symbolic because it introduced the idea of the Global "Mutirão",

[18] UN Environment Programme Finance Initiative, "The COP30 mutirão decision and what it means for the global finance sector," accessed February 26, 2026, https://www.unepfi.org/themes/climate-change/the-COP30-mutirao-decision-and-what-it-means-for-the-global-finance-sector/.
[19] Yossi Mekelberg, "UN climate summit sends a message of global 'mutirao'," *ARAB NEWS*, accessed November 15, 2025, https://www.arabnews.com/node/2622761.
[20] Kristian Noll, "COP30's mutirão is an opportunity to bring faith and climate policy closer together," *LSE Blogs*, accessed November 6, 2025, https://blogs.lse.ac.uk/religionglobalsociety/2025/11/COP30s-mutirao-is-an-opportunity-to-bring-faith-and-climate-policy-closer-together/.
[21] Linda Kalcher, "The COP of Truth" – where did it get us?" *Strategic Perspectives*, November 22, 2025, https://strategicperspectives.eu/the-cop-of-truth-where-did-it-get-us/.
[22] Dr Emel Akçalı, "COP30: The global Mutirão in a fragmented climate order," *Kings College London*, November 14, 2025, https://www.kcl.ac.uk/COP30-the-global-mutirao-in-a-fragmented-climate-order.

which will expedite the transition to renewable energy, mobilise adaptation funds, and incorporate health into climate action. They have noted that, while the message from Belém is clear that nations can save millions of lives and create a more equitable and healthy future by uniting health and climate under a single strategy supported by funding and political courage, implementation remains the primary challenge.[23] However the Lancet Regional Health – Europe, in its *Editorial*, has opined that the outcome of the COP30 in Belém, Brazil, illustrates a persistent implementation gap between climate commitments and actual policy action and characterised the COP30 as emblematic of systemic accountability failures within the UN climate regime, where robust reporting mechanisms like NDC Synthesis, Adaptation Gap Report, and Global Stocktake have not translated into enforceable actions.

The outcomes underscore deep geopolitical divisions and raise concerns about the narrowing window for effective intervention ahead of upcoming COP31.[24] Youssef Moftah has focused on the role of non-state parties in climate action at COP30, highlighting the gap in action and the inability of state actors to implement specific, practical measures in their climate change agendas. The paper has suggested the necessity for improved legal frameworks and increased regional and international cooperation, emphasising the growing significance of non-state actors in the climate process and their role in capacity building and Action for Climate Empowerment (ACE). It has also presented an alternative vision that emphasises the importance of sectors directly affected by climate change and with little to no ability to stop it in their local communities.[25] Anes Saadi synthesised the technical, governance, and simulation evidence to bridge dialogue and delivery, proposing tangible mechanisms that align with the high-level political text of COP30, with measurable implementation actions at global, national, and community levels.[26]

Some of the literature has focused on the shortcomings of the outcomes of the COP30. Yamina Saheb and Ana Díaz-Vidal commented that the main COP30 declaration overlooks the underlying causes of climate change and reduces climate diplomacy to a technocratic crisis management exercise.[27] The Climate Action

[23] Alexandre Padilha, Tedros Adhanom Ghebreyesus, "Climate change threatens global health, but COP30 sparked hope," *The BMJ 2025*, December 30, 2025, https://www.bmj.com/content/bmj/391/bmj.r2682.full.pdf.

[24] "COP30: still failing to meet the challenge," *The Lancet Regional Health – Europe* 59 (2025): 101-559, https://www.thelancet.com/action/showPdf?pii=S2666-7762%2825%2900351-5.

[25] Youssef Moftah, "Non-State actors: Opportunity or Challenge to ACE and Capacity Non-State actors: Opportunity or Challenge to ACE and Capacity Building under COP30 mutirão Action Plan Building under COP30 mutirão Action Plan," *BUE Scholar*, accessed February 18, 2026, https://buescholar.bue.edu.eg/cgi/viewcontent.cgi?article=1167&context=COP30.

[26] Anes Saadi, "COP-30 Simulation Report Ignite and Insight: A Global Mutirão," *BUE Scholar*, accessed February 25, 2026, https://buescholar.bue.edu.eg/cgi/viewcontent.cgi?article=1102&context=COP30.

[27] Yamina Saheb, Ana Díaz-Vidal, "The COP30 Mutirão agreement was just talk without truth," *Climate Home*

Network (CAN) International, in its Press Release, frames the COP30 as a mixed outcome, combining a historic breakthrough on climate justice with significant shortcomings in finance, adaptation, and fossil fuel transition. The COP30 has been criticised for watering down the commitments of developed countries to provide adaptation finance, and the timelines to deliver the tripling of finance by 2035, which have also been termed as a betrayal towards vulnerable and impacted people in the Global South.[28] The International Institute for Sustainable Development (IISD) noted that Belém created division in the world but spurred momentum on significant issues that will persist after the conference. By calling for the tripling of adaptation finance by 2035, the "Mutirão" decision has kept adaptation finance on the negotiation table and signalled political will to support climate change-affected countries. [29]

Focusing on Bangladesh, Shariful Islam identified the main shortcoming of the national curriculum: it does not adequately teach students about climate change, leaving them unprepared for the future and new jobs in the green economy. He suggested a policy that combines national law with experiential learning at the local level to develop the skills of young people, so they can find green jobs and help their communities become more resilient. The author has presented the policy as a "Mutirão" model, which is a collective effort that can begin in every classroom.[30]

Although the available literature has focused on the outcomes of the COP30, there is a significant gap in the discussion and analysis of the Global "Mutirão" framework and its impact on climate change solutions. Hence, the present paper attempts to fill the gap.

3. The Global "Mutirão": Normative Foundations and Principles of the Concept

Climate change has been reaffirmed as a common concern for humankind, and it has been emphasised that climate policies must respect human rights, gender equality, inter-generational equity, and the rights of indigenous peoples and local

News, November 24, 2025, https://www.climatechangenews.com/2025/11/24/the-COP30-mutirao-outcome-was-just-talk-without-truth/.

[28] "COP30 takes a hopeful step towards Justice, but does not go far enough," Climate Action Network International, November 22, 2025, https://climatenetwork.org/2025/11/22/COP30-takes-a-hopeful-step-towards-justice-but-does-not-go-far-enough/.

[29] IISD, "COP30 Outcome: What it means and what's next," November 22, 2025, https://www.iisd.org/articles/insight/cop-30-outcome-what-it-means-and-whats-next.

[30] Shariful Islam, "A Global Mutirão in the Classroom: A National Curriculum Policy A Global Mutirão in the Classroom: A National Curriculum Policy for Bangladesh to Build Youth Capacity for Green Jobs in for Bangladesh to Build Youth Capacity for Green Jobs in Alignment with the SAA and ACE Alignment with the SAA and ACE," *BUE Scholar*, accessed February 20, 2026, https://buescholar.bue.edu.eg/cgi/viewcontent.cgi?article=1165&context=COP30.

communities, as well as protecting ecosystems and biodiversity. A framework for accelerating global climate action through extensive international cooperation is outlined in the draft proposal titled *"Global Mutirão: Uniting Humanity in a Global Mobilization against Climate Change,"* which was approved in Belém during the COP30. The concept has been established on the following principles –

(i) Implementation of Climate Commitments

Intensified frustration over the gap between promises and action has prompted a discussion about accelerating the implementation of current climate commitments by establishing the "Mutirão" concept. For climate-vulnerable developing countries, progress has been sluggish, unequal, and frequently delayed despite numerous international agreements, especially when the issue of providing financial, technological, and adaptation support comes to the fore. The draft decision has emphasised the acceleration of the implementation of the existing climate commitments by anchoring the "Mutirão" approach within the goals of the Paris Agreement, particularly the objective of limiting global warming to well below 2°C, while pursuing efforts to keep it within 1.5°C.

The draft has stressed the urgency of the collective action needed to close the gap between the current national commitments and the required emission targets for achieving the objective. The development of a "Global Implementation Accelerator" to assist nations and stakeholders in quickly implementing climate commitments is a significant outcome of the decision, which will promote the implementation of NDCs and National Adaptation Plans (NAPs) through increased collaboration, funding, and technology transfer. The decision defines climate policy as a "Mutirão" and advocates for a coordinated effort among states, international organisations, and non-state actors to close the gap between current commitments and the emissions reductions required to keep global warming within 1.5°C. The Belém Mission to 1.5°C is also an initiative to accelerate the practical implementation of climate mitigation and adaptation measures, encouraging states to strengthen their climate strategies and investments to maintain the feasibility of the 1.5 °C target.

(ii) Climate Finance and Resource Mobilisation

The "Mutirão" decision has also emphasised the scaling up of climate finance, particularly for the adaptation of developing countries, which are facing the most adverse impacts of climate change despite their minimal contributions to global warming and climate change. Adaptation efforts, including building climate-resilient infrastructure, protecting livelihoods, and strengthening disaster preparedness, remain critically underfunded compared to mitigation. The developing countries are

at risk of falling into deeper cycles of vulnerabilities and loss without a significant increase in accessible, predictable, and grant-based finance. The "Mutirão" decision focused on increasing climate finance by providing a high-level political framework to expedite the implementation of the New Collective Quantified Goal (NCQG) agreed upon at COP29.[31]

The decision has encouraged the developed states and international financial institutions to mobilise substantial, accessible funding for mitigation and adaptation, strengthen investments and financial flows, and improve access to international climate funding mechanisms, aligning with low-carbon and climate-resilient development pathways. In order to address the growing resource gap for climate resilience, the decision formally called for tripling adaptation finance by 2035 compared to 2025 levels. The Baku-to-Belém Roadmap[32], aims for increasing climate finance flows to developing states from both public and private sources to at least US$ 1.3 trillion annually by 2035 which was acknowledged.

(iii) Adaptation and Climate Resilience

Based on collective responsibility, the adaptation and climate resilience of the "Mutirão" decision differ from previous approaches by shifting its focus from a pledge-driven, fragmented model to a coordinated, action-oriented framework. Initially, climate initiatives often considered adaptation as secondary to mitigation and relied heavily on slow, project-based funding mechanisms. In contrast, the "Mutirão" concept emphasises urgency, local ownership, and the integration of adaptation into broader development planning; at the same time, it encourages simultaneous action by governments, financial institutions, and communities. According to the "Mutirão" decision, for climate-vulnerable regions, adaptation requires equal consideration along with mitigation and encourages countries to strengthen NAPs, invest in climate-resilient infrastructure, and protect ecosystems. The decision has given priority to the communities vulnerable to climate-induced hazards of the small island states, least developed countries and regions affected by extreme climate events like heat waves, floods and droughts, and highlighted the importance of Nature-based Solutions (NbS), ecosystem protection and indigenous resilience and adaptation knowledge.

[31] United Nations Framework Convention on Climate Change, "New collective quantified goal on climate finance," accessed March 30, 2026, https://unfccc.int/sites/default/files/resource/cma2024_L22_adv.pdf.
[32] COP29 Baku, Azerbaijan, and COP30 Brasil Amazonia, "Report on the Baku to Belém Roadmap to 1.3T," accessed March 25, 2026, https://unfccc.int/sites/default/files/resource/Relatorio_Roadmap_COP29_COP30_EN_final.pdf.

Traditional nature-based solutions significantly support the "Mutirão" decision by aligning with its core principle of collective, locally driven action, which is often cost-effective, scalable, and immediately applicable, making them well-suited to the need promoted by the "Mutirão" decision. By integrating traditional nature-based solutions into climate strategies, the "Mutirão" framework can accelerate adaptation and resilience building, as well as ensure that interventions are culturally appropriate, environmentally sustainable, and rooted in community ownership. This not only enhances effectiveness but also helps bridge the gap between global commitments and on-the-ground implementation.

(iv) Strengthening International Cooperation and Collective Mobilisation

The "Mutirão" decision has stressed on the collective global mobilisation among the states, international organisations, private sectors, civil society and local communities, while promoting knowledge sharing, technological cooperation and joint initiatives, which could accelerate climate actions. The "Mutirão" framework considers multilateralism as an inclusive ecosystem of partnerships in which diverse stakeholders collaborate to deliver practical solutions and tangible climate outcomes, rather than merely a diplomatic negotiation process. The "Mutirão" framework considers multilateralism an inclusive ecosystem of partnerships, as the scale and necessity of the climate crisis demand more than periodic diplomatic negotiations; they require continuous, coordinated action across all levels.

Traditional multilateral processes have often been slow, state-centric, and focused on consensus-building, leading to delayed implementation. In contrast, "Mutirão" emphasises collaboration among governments, international organisations, financial institutions, the private sector, and local communities to co-deliver practical solutions. By broadening participation and prioritising implementation, this approach transforms multilateralism into a dynamic, action-oriented platform which mobilises resources, shares knowledge, and produces tangible climate outcomes rather than simply generating new commitments. The decision has reiterated that the stakeholders should work together to promote a supportive and open international economic system, which would lead to sustainable economic growth and development across all parties, particularly developing countries, and enable them to better address climate change-related issues.

(v) Mobilising All Actors

Framing climate actions as a shared global effort, the "Mutirão" decision has highlighted on the role of non-party stakeholders, including civil society, private sector, financial institutions, cities and other subnational authorities in multilevel climate actions in addressing and responding to climate change.

The Global "Mutirão" redefines climate governance from fragmented national efforts towards a cooperative and implementation-focused collective global mobilisation model which emphasises accelerated action, increased climate finance, strengthened adaptation strategies and inclusive global partnership for advancing towards the achievements of the goals of the Paris Agreement.

3.1 *The Global "Mutirão" Concept: Comparison with Other UNFCCC Mechanisms*

The global climate negotiations reflect evolving strategies for addressing global warming and climate change, as well as a gradual shift towards broader, participatory, and implementation-oriented cooperation. Climate negotiations have advanced from a legally binding emissions-reduction framework under the Kyoto Protocol to a flexible, participatory structure under the Paris Agreement, and are now moving towards a more collaborative mobilisation approach, such as the Global "Mutirão" proposed at COP30.

The Kyoto Protocol, adopted in 1997, is the first legally binding international initiative to reduce GHG emissions, as it imposed mandatory emission-reduction targets on developed countries while largely exempting developing countries, based on the principle of Common but Differentiated Responsibilities (CBDR)[33]. Despite the establishment of mechanisms such as Emissions Trading and the Clean Development Mechanism (CDM), which reduced the overall effectiveness, the Kyoto Protocol faced challenges due to limited participation and the withdrawal or non-participation of several major emitters, most notably the United States, which signed but never ratified the agreement, and later Canada, which formally withdrew in 2011. Additionally, several rapidly growing emitters, including China, India, and Brazil, were not subject to binding emission-reduction targets under the protocol, reflecting the principle of CBDR. This uneven participation significantly weakened the Protocol's overall effectiveness in reducing global greenhouse gas emissions.

However, the Paris Agreement, adopted in 2015, represents a significant transformation in global climate governance by introducing a bottom-up approach through NDCs rather than top-down binding targets. The Agreement has focused on limiting global temperature rise well below 2°C while pursuing efforts to limit it to 1.5°C, and on strengthening adaptation, transparency, and climate finance. Although this Agreement has expanded the scope of participation across all states, it largely depends on voluntary commitments and regular review procedures to gradually increase ambition.

[33] The Kyoto Protocol is built on the principle of Common but Differentiated Responsibilities (CBDR), which acknowledges that while all nations must combat climate change, developed countries bear greater historical responsibility and capacity to reduce emissions. It legally bound developed nations to emission targets, while developing nations had voluntary or no binding commitments. For more details, UNFCCC, "Kyoto Protocol to the United Nations Framework Convention on Climate Change," accessed March 9, 2026, https://unfccc.int/sites/default/files/resource/docs/cop3/l07a01.pdf.

The reliance on NDCs under the Paris Agreement means that emission reduction targets are largely voluntary, non-binding, and uneven in ambition, making it difficult to ensure that collective action aligns with the 1.5°C or well-below 2°C temperature goals. Additionally, the agreement depends heavily on transparency and periodic review rather than enforceable compliance mechanisms, which may slow meaningful progress. The withdrawal or weakening of engagement by major emitters, like the United States, significantly undermines the global mitigation objective, as a small number of large economies account for a substantial share of global emissions.

Rather than creating new commitments, the Global "Mutirão" of COP30 aims to accelerate the implementation of existing Paris Agreement pledges by fostering collaboration among governments, international organisations, the private sector, civil society, and indigenous communities through mechanisms such as the Global Implementation Accelerator and the Belém Mission to 1.5°C. The approach has focused on the continuous and inclusive process of cooperative action and prioritised practical solutions, shared responsibilities and rapid scaling up of mitigation and adaptation.

However, among the initiatives, the Kyoto Protocol represents a rule-based, top-down model of global climate governance characterised by legally binding commitments and centralised oversight. In contrast, the Paris Agreement adopts a hybrid framework that combines flexible NDCs with mechanisms for global monitoring and accountability. The evolving Global "Mutirão" approach, meanwhile, highlights a model of networked cooperation that prioritises collective mobilisation and collaborative implementation across states and non-state actors. While previous decisions established the overarching legal and political frameworks, the Global "Mutirão" serves as a complementary global mobilisation strategy to translate these high-level commitments into broad-based, tangible, and immediate actions on the ground. The Global "Mutirão" initiative emphasises on a bottom-up, decentralised approach that promotes immediate climate action through self-organised, collective efforts at the community level. The "Mutirão" era is characterised as 'interplural governance' as it reflects a transition from a global system traditionally shaped by hierarchical power structures and state-centric diplomacy to a more distributed ecosystem in which non-state actors play a central role in implementation. Dr Emel Akçalı has also noted that the COP30 differs from previous conferences in both spirit and structure, signalling the emergence of an interplural[34] world order. Under this approach, the scale and complexity of the climate challenge are acknowledged as exceeding the capacity of any state alone, thereby necessitating a network of interconnected initiatives operating across local, national, and transnational levels.

[34] The Mutirão era is described as "interplural" governance because it signals a shift away from a global order dominated by traditional power hierarchies and state-centric diplomacy toward an ecosystem where non-state actors are central to implementation. This model recognises that the climate struggle is too vast for any single hegemon to lead, requiring a network of intersecting initiatives at local, national, and transnational levels. For more details, Akçalı, "COP30: The global Mutirão."

Table 1: Key Differences between Kyoto Protocol, Paris Agreement and Global "Mutirão"[35]

Feature	Kyoto Protocol	Paris Agreement	Global "Mutirão"
Adoption Year	1997 (entered into force in 2005)	2015 (entered into force in 2016)	2025 (At the COP30, Belém, Brazil)
Legal Nature	Legally binding emission targets for developed countries	Legally binding procedural obligations; nationally determined targets	Political decision framework and cooperative implementation mechanism
Participation Model	Top-down, binding targets for the *Annex I* (Developed) countries only	Bottom-up, universal participation through NDCs	Collective mobilisation approach involving states, subnational actors, private sector, and civil society
Emission Targets	Fixed reduction targets (e.g., average 5 Percent below 1990 levels in the first commitment period)	Countries submit NDCs	Focus on accelerating implementation and closing ambition gaps rather than setting new targets
Scope of Responsibility	Based on CBDR – strong differentiation	CBDR "in light of different national circumstances"	Shared global mobilisation ethos; cooperation framed as mutual self-interest
Temperature Goal	No explicit global temperature goal	Limit warming to "well below 2°C" and pursue for 1.5°C	Reaffirms 1.5°C urgency and emphasises on immediate action
Market Mechanisms	CDM, Emissions Trading, Joint Implementation	Article 6 on carbon markets and cooperative approaches	Implementation Accelerator tools and coordination platforms
Climate Finance	Limited, primarily through CDM and adaptation funds	Developed countries to mobilise US$ 100 billion annually (extended commitments)	Focus on scaling finance access, delivery reform, and accountability gaps
Monitoring & Transparency	Reporting mainly for developed countries	Enhanced Transparency Framework (ETF) for all	Emphasis on implementation tracking and real-time acceleration

[35] Compiled from UNFCCC documents – United Nations Framework Convention on Climate Change, "Kyoto Protocol to the United Nations Framework Convention on Climate Change," accessed Mar 12, 2026, https://unfccc.int/sites/default/files/resource/docs/cop3/l07a01.pdf; United Nations, "Paris Agreement," accessed March 12, 2026, https://unfccc.int/sites/default/files/english_paris_agreement.pdf; United Nations Framework Convention on Climate Change, "Global Mutirão: Uniting humanity."

Philosophical Approach	Compliance-driven regulatory regime	Hybrid: legal framework and nationally driven ambition cycle	Ethos of collective action ("Mutirão" – cooperative mobilisation tradition)
Inclusion of Non-State Actors	Minimal formal role	Recognised but state-centred	Strong emphasis on cities, indigenous peoples, civil society, local communities

3.2 *Collective Initiatives for Environmental Solutions Around the World*

The concept of "Mutirão" is recognised in Latin American countries and beyond. The Brazilian notion of "Mutirão" is rooted in community collaboration for public works, such as constructing houses, roads, or irrigation systems. Globally, there is evidence of similar traditions in which community members work together on development activities.

'Imece,' rooted in rural Anatolian culture, is a unique Turkish term for a traditional, voluntary, and collective labour system in which community members unite to complete tasks for one another, such as harvesting or building, and is often described as "collective work" or "social solidarity".[36] The concept of collaboration for the benefit of all is highly valued in African civilisations. "Mutirão" is similar to the Burkinabé word *'burkinidi,'* meaning that one must demonstrate integrity, humanism, humility, and selflessness in both personal and professional life.[37] Social interaction is considered as cooperative, collaborative, and consensual in Indonesia. The term *'Gotong Royong'*[38],' which literally translates to 'voluntary mutual assistance,' refers to the sharing of responsibilities among community members as well as an individual's duty to society. In a *gotong royong* community, members would share responsibilities and work together to avoid conflict. *'Harambee'*[39],' the official motto of Kenya, meaning 'all pull together' in Swahili, is a tradition of community self-help events, such as fundraising or development activities, which have long been significant in parts of East Africa as a means of establishing and sustaining communities. *'Ubuntu'*[40],' a humanist concept and a traditional African

[36] Akçalı, "COP30: The global Mutirão."
[37] "Burkinidi, minka, and balu wala: Learn about the many versions of COP30's "Global Mutirão"," COP30 Brasil Amazonia, accessed February 27, 2026, https://COP30.br/en/news-about-COP30/burkinidi-minka-and-balu-wala-learn-about-the-many-versions-of-COP30s-global-mutirao#:~:text=%22Mutir%C3%A3o%20resembles%20the%20Burkinab%C3%A9%20word,and%20in%20one's%20personal%20life.
[38] Law Insider, "gotong royong definition," accessed March 11, 2026, https://www.lawinsider.com/dictionary/gotong-royong.
[39] Mwende Mutuli Musau, "Harambee: The law of generosity that rules Kenya," *BBC*, October 6, 2020, https://www.bbc.com/travel/article/20201004-harambee-the-kenyan-word-that-birthed-a-nation.
[40] The African Federation, "2025 Ubuntu Celebrations," accessed March 11, 2026, https://theafricanfederation.

philosophy, emphasises on the interconnectedness of humanity. By fostering a sense of interconnectedness and mutual support, *'Ubuntu'* can enhance teamwork and, in the community, lead to collaborative efforts to address social concerns and assist those in need. The traditions of collective effort reflect the principles of community driven collective initiatives to solve common challenges. However, the concept of "Mutirão" in climate change actions emphasises that the climate change induced challenges cannot be addressed by any state individually and require a shared endeavour.

There are already such cooperative strategies like the Global "Mutirão" in place worldwide for social mobilisation, environmental preservation, and climate action. Starting with the activism of Greta Thunberg's 'Fridays for Future[41]' movement, a global youth-led climate mobilisation that demonstrates collective action by citizens, students, and civil society, organising concurrently to influence climate governance. 'The Bonn Challenge' is a global effort by governments, Non-Governmental Organisations (NGOs), and local communities launched in 2011 to restore 150 million hectares of degraded and deforested landscapes by 2020 and 350 million hectares by 2030.[42] In many regions of the world, community-based collaborative efforts for protecting the environment reflect the similar spirit of cooperation highlighted in the Global "Mutirão" concept. For preserving ecosystems, repairing damaged surroundings, and managing natural resources sustainably, local communities collaborate on these projects. 'The Community Forestry Initiative of Nepal' is among the best examples of community environmental management in which local user groups have been granted forest management rights by the Nepalese government since the 1990s. Large tracts of damaged forest have been regenerated, supporting both biodiversity protection and sustainable lifestyles as communities work together to manage resource use, preserve forests, and carry out reforestation projects.[43] 'The Green Belt Movement (GBM)'[44],' an internationally recognised environmental organisation established in 1977 by the Nobel Laureate Wangari Maathai under the National Council of Women of Kenya (NCWK), engages and empowers communities, especially women, to protect natural resources and enhance their livelihoods. Originating in Niger in 1983, 'Farmer Managed Natural Regeneration (FMNR)' is an affordable land restoration method designed to reduce poverty and hunger among subsistence farmers by boosting food and timber production and enhancing resilience to climate extremes. Involving coppicing and

org/ubuntu/.

[41] Fridays for Future, "What we do," accessed March 11, 2026, https://fridaysforfuture.org.

[42] Restore Our Future, "The Bonn Challenge," accessed March 11, 2026, https://www.bonnchallenge.org.

[43] "Nepal's community forestry initiatives: A successful model to combat deforestation?" Green Earth, accessed March 11, 2026, https://www.green.earth/blog/nepals-community-forestry-initiatives-a-successful-model-to-combat-deforestation.

[44] "About the Green Belt Movement," accessed March 12, 2026, https://www.greenbeltmovement.org.

pollarding techniques rooted in traditional practices and adapted to local conditions, farmers protect and manage naturally regenerating trees and shrubs in their fields, either from existing rootstock or seeds dispersed through animal manure. The first ecofeminist environmental movement, 'the Chipko Movement[45],' began in the 1970s in the Himalayan foothills of India, which emerged when a village community, led by the female leader Gaura Devi, stood up against the loggers to protect their trees and forests from deforestation, and this non-violent resistance inspired other communities, eventually spreading throughout India and beyond.

Nature-based interventions are also evident in different parts of the world. 'Community-based mangrove forest restoration and management[46]in Vietnam, with support from the international NGO CARE, is an example of how coastal communities developed a comprehensive strategy to address emerging climate change risks. *'Johad*[47]' is a traditional water-harvesting system widely used in the arid and semi-arid regions of Rajasthan in India to store monsoon rainwater for use during dry periods. These structures are designed to capture runoff from monsoon rainfall, allowing the water to gradually infiltrate the soil and recharge underground aquifers, resulting in help ensure a reliable water supply for local communities during periods of water scarcity. 'Community-based coral reef restoration in the Philippines[48]' engages local fishers and community volunteers in rehabilitating degraded marine ecosystems through practical restoration activities. 'Community-Based Early Warning Systems (CBEWS)' in the Pacific Islands[49] enable local communities to effectively manage disaster risks through timely, accessible, and context-specific alerts. These systems combine traditional knowledge, gender-responsive approaches, and modern technologies, such as SMS notifications and sirens, to strengthen preparedness and response to hazards including cyclones, floods, and droughts.

The aforementioned instances of collective efforts demonstrate a more comprehensive governance framework grounded in collective mobilisation. It emphasises the involvement of diverse actors, including states, local communities,

[45] "The Chipko Movement," accessed March 12, 2026, https://www.sugiproject.com/blog/the-chipko-movement.

[46] Case study platform, "Community-based mangrove forest restoration and management," accessed March 12, 2026, https://casestudies.naturebasedsolutionsinitiative.org/casestudy/community-based-mangrove-forest-restoration-and-management/.

[47] "Johads: An Ancient Solution to Water Harvesting," accessed March 12, 2026, https://humblebeeorganic.com/water-conservation/johad-water-harvesting/.

[48] E. D. Gomez, "Coral reef restoration involving local communities in the Philippines," (power-point presentation), accessed March 12, 2026, https://gefcoral.org/LinkClick.aspx?fileticket=QYGjRxOAYQw%3D&tabid=4302&language=en-US.

[49] World Meteorological Organization, "Pacific project enhances early warning systems for island resilience," 24 July 2025, https://wmo.int/media/news/pacific-project-enhances-early-warning-systems-island-resilience.

international organisations, and civil society, in coordinating efforts to address complex environmental challenges around the world. Community-based climate adaptation initiatives across different regions further illustrate how local collective action contributes to broader processes of global climate governance. Practices such as mangrove restoration programmes supported by international NGOs in Vietnam and traditional rainwater harvesting through '*Johad*' in India demonstrate how communities mobilise shared knowledge, local resources, and collective labour to respond to climate risks. Similarly, ecosystem restoration and sustainable land management initiatives, including the Farmer Managed Natural Regeneration in Niger, coral reef conservation initiatives in the Philippines, community forestry programmes of Nepal, the Green Belt Movement in Kenya, community-led mangrove restoration in Vietnam, and community-based early warning systems across the Pacific Islands, highlight the critical role of grassroots participation in strengthening environmental resilience. In addition to these community-driven efforts, initiatives mobilised by social movements and civic actors, such as Fridays for Future and the Chipko Movement, have also played a significant role in stimulating public engagement and global awareness of environmental issues. These localised and transnational initiatives complement international climate governance frameworks, particularly the Paris Agreement, which relies heavily on national and subnational implementation. Although the NDCs under the Paris Agreement are formulated at the national level, the agreement itself can be understood as a form of collective global action, operating within a shared international framework of ambition, cooperation, transparency, and mutual accountability.

These instances demonstrate that community-based adaptation strategies play a crucial role in strengthening climate resilience. Such initiatives also illustrate how collective local actions complement global climate governance frameworks and align with the philosophy of "Mutirão", reinforcing the importance of collective, multi-level mobilisation and emphasising that effective climate governance depends not only on international agreements but also on coordinated action among communities, governments, and civil society worldwide.

However, by fostering collective mobilisation and engaging multiple actors across levels of governance, the Global "Mutirão" approach has the potential to improve global responses to climate change. It promotes cooperation to accelerate climate action and bridge the gap between policy promises and implementation, in contrast with traditional state-centric frameworks. The approach can boost innovation, knowledge sharing, and practical solutions to climate change by integrating social movements, grassroots initiatives, and international collaboration. By expediting the implementation of NDCs through concerted local, national, and international efforts, the "Mutirão" approach enhances current international frameworks. However,

the success of this approach depends on the effective integration of the existing institutional frameworks, securing adequate resources, and ensuring coordination among diverse actors. It is better viewed as a complementary governance framework that can accelerate and extend global climate action rather than as a standalone approach to climate change.

4. Climate Actions of Bangladesh: A "Mutirão" in Practice

Bangladesh, one of the most climate-vulnerable countries in the world, has developed numerous community-led climate initiatives for addressing climate-induced challenges like cyclones, flooding, salinity intrusion, and riverbank erosion. Local communities play an active role in disaster preparedness, climate-resilient agriculture, mangrove restoration, and participatory adaptation planning, drawing on indigenous knowledge and institutional support to strengthen resilience. These grassroots efforts align closely with the notion of the "Mutirão". The experience of Bangladesh demonstrates that community engagement, combined with policy support and global cooperation, can foster an integrated, collaborative approach to climate action, underscoring the importance of collective responsibilities in building sustainable climate solutions.

4.1 *Community-led Climate Adaptation Initiatives in Bangladesh*

Bangladesh has earned recognition as a global leader in community-led climate adaptation by utilising grassroots-level initiatives in coastal areas to adapt to hazards such as floods and cyclones. The country has employed technological innovations, policy and financial actions, emphasising advocacy for climate justice and focusing on NbS. The concept of NbS is among the most effective, adaptive, and sustainable approaches to climate change adaptation, helping reduce vulnerability and increase the adaptive capacity of agricultural systems to climate risks.[50] Local communities often share data via SMS and audio recordings, forming a human chain for safety. The country has integrated climate resilience into its development policies and plans. The high vulnerability of the country to the adverse impacts of climate change has compelled it to advocate for equitable finance and to push for the phasing out of fossil fuels through robust negotiations. The country has also focused on ecosystem-based solutions. Community groups in coastal Bangladesh work alongside government agencies and NGOs to restore mangrove ecosystems, especially in the Sundarbans. The approaches that Bangladesh follow to fight against the climate-induced challenges align with the "Mutirão" spirit in which local

[50] Nafia Saddaf, Rumana Sultana, Bushra Anjum, "Vulnerability and effectiveness of nature-based solutions (NbS) in the farming communities of coastal Bangladesh," *Environmental Challenges* 14 (January 2024).

knowledge and community-based initiatives have become pivotal for surviving and adapting to global climate actions. The country has strongly emphasised on collective action, local knowledge, and community-based resilience. Facing frequent floods, cyclones, river erosion, and salinity intrusion, communities in Bangladesh have developed adaptive practices rooted in lived experience, such as floating agriculture, raised homesteads, community-based disaster preparedness, and early warning systems. These locally driven initiatives are increasingly supported by government policies and civil society initiatives, creating a layered system of adaptation that blends traditional knowledge with institutional support. This reflects the "Mutirão" principle of shared responsibility, in which solutions are not imposed from above but are jointly developed with those most affected. By prioritising inclusivity, local ownership, and practical resilience-building, Bangladesh demonstrates how grassroots innovation can play a central role in translating global climate goals into effective on-the-ground action.

In Bangladesh, community-led climate adaptation involves enabling local groups, particularly women and vulnerable populations, to develop and implement solutions like saline-resistant farming, improved water management (rainwater harvesting, climate-proof wells), disaster-resilient housing (*killas*), and alternative livelihoods. The climate change adaptation initiatives of Bangladesh are remarkable for their distinctive emphasis on placing women at the forefront of the projects, despite the traditional and cultural challenges they regularly encounter.[51] The Ministry of Environment, Forest and Climate Change (MoEFCC) works on NAPs. One of the key programmes of community-based initiatives for climate solutions is the Local Government Initiative on Climate Change (LoGIC)[52], which supports local governments and communities through grants, such as the Performance-Based Climate Resilience Grant (PBCRG),[53] for adaptation. International organisations like the United Nations Development Programme (UNDP) and Global Center on Adaptation (GCA), and NGOs like BRAC, CARE Bangladesh, ActionAid, Friendship, etc. are engaged in community-led climate adaptation initiatives which encourage and support local communities to develop and implement their own solutions for climate challenges by focusing on water, livelihoods, and resilience, and

[51] UNDP Bangladesh, "Community-Led Initiative in Climate Resilience: Lessons from Bangladesh," December 17, 2024, https://www.undp.org/bangladesh/blog/community-led-initiative-climate-resilience-lessons-bangladesh.

[52] A multi-donor collaborative initiative of the Government of Bangladesh, UNDP, UNCDF, European Union (EU till 2023), Embassy of Sweden (SIDA) and Embassy of Denmark aiming to enhance the capacity of vulnerable communities, Local Government Institutions and civil society organisations for planning and financing climate change adaptation solutions in selected climate-vulnerable areas. For more details, Local Government Initiative on Climate Change (LoGIC) Project, "About LoGIC," accessed March 28, 2026, https://www.logicbd.org.

[53] PBCRG, "What is PBCRG," accessed March 28, 2026, https://www.logicbd.org/pbcrg/.

provide funds and implement projects in climate vulnerable regions of the country.

4.1.1 Best examples of community-based climate solutions in Bangladesh

Locally-led adaptation is the primary focus of the community-based climate solutions of the country, incorporating traditional knowledge and nature-based approaches to deal with salinity, floods, and cyclones. The key approaches and initiatives of community-led climate adaptation focus mainly on enhancing local capacity to plan and finance their own adaptation, shifting away from former top-down models. These projects target coastal areas to build the adaptive capacity of women and girls for water security and livelihoods and make them change agents. These initiatives also promote models such as the Forest-Fruit-Fish-Vegetables (3FV) system and the protection of resilient crops and livestock. Disaster preparedness, including building cyclone-resistant homes, improving early warning systems, strengthening embankments through community management, and securing water and sanitation by implementing rainwater harvesting, climate-proof tubewells, and providing safe sanitation solutions, is also an integral part of these initiatives. Some of the best examples of community-based climate solutions in Bangladesh include –

(i) Nature-Based Coastal Protection (Mangrove Restoration)

Communities in the south-western coastal areas are restoring and protecting mangrove forests to establish them as natural buffers against cyclones and storm surges. The project "Mangroves4Life: Community-Based Mangrove Restoration for Coastal Protection in the Sundarbans Region of Bangladesh" empowers women and young people in Gabura Union to fight climate change and protect the Sundarbans ecosystem by restoring mangroves.[54] Through this community-based project with a duration between 2025 and 2030, women will be empowered to foster long-term sustainability, strengthen climate resilience, protect biodiversity, and establish a paradigm for grassroots climate action in the Sundarbans.

(ii) Floating Agriculture in Bangladesh

In flood-prone regions of Bangladesh, communities practice a floating agriculture system, a traditional climate adaptation technique in which crops are grown on floating beds made of water hyacinth and other organic materials.[55] This

[54] SESDO, "Mangroves4Life: Community-Based Mangrove Restoration for Coastal Protection in the Sundarbans Region of Bangladesh," accessed March 27, 2026, https://www.sesdobd.org/mangroves4life/.
[55] Jordi Sales, "These farmers in Bangladesh are floating their crops to adapt to climate change," Global Center on Adaptation, November 13, 2019, https://gca.org/these-farmers-in-bangladesh-are-floating-their-crops-

indigenous technique enables farmers to cultivate vegetables during prolonged flooding and in low-lying, waterlogged areas, ensuring food security and livelihood resilience in regions affected by climate change and rising water levels.

(iii) Saline-Tolerant Agriculture

In Bangladesh, saline-tolerant agriculture is an important adaptation strategy against soil salinity caused by climate change. According to a government study, around 25-30 per cent of the country's arable land is located in the 21 coastal districts, of which 53 per cent have become saline-affected.[56] In particular, in high-risk districts like Satkhira, farmers are recovering previously fallow lands, ensuring food production, and increasing revenues by using salt-tolerant rice varieties such as BRRI-47, BRRI-67, and Binadhan-10, as well as vegetables such as carrots, potatoes, and kohlrabi.[57]

(iv) Climate-Resilient Housing

The coastal regions of Bangladesh are highly vulnerable to climate change due to their low-lying geography and proximity to the Bay of Bengal. Rising sea levels and increasingly frequent and intense cyclones often cause storm surges, flooding, and damage existing infrastructure, threatening the livelihoods and well-being of coastal communities. In response, Climate-resilient Houses (CRHs) developed by BRAC are specially designed housing solutions for vulnerable populations, enabling them to better withstand climate-induced disasters and adapt to the long-term impacts of climate change.[58]

(v) Solar-Powered Irrigation and Energy

In Bangladesh, solar-powered irrigation, which replaces diesel pumps to cut emissions, lower agricultural costs, and secure water for agriculture, is an essential climate adaptation approach. By installing 50,000 solar pumps by 2027, the government hopes to secure irrigation for water-intensive crops like *Boro* paddy

to-adapt-to-climate-change/; Food and Agricultural Organization of the United Nations, "Floating Garden Agricultural Practices, Bangladesh," accessed March 26, 2026, https://www.fao.org/giahs/giahs-around-the-world/bangladesh-floating-garden-agricultural-practices/en.

[56] Pinaki Roy, "Relay Cropping: New hope for wheat in coastal lands," *The Daily Star*, March 28, 2026.

[57] Shamsuddin Illius and Abu Azad, "Salt tolerant rice varieties bring hope to Bangladesh farmers," *The Business Standard*, April 27, 2022; Cordaid, "The Salt Solution: Growing Salt-Tolerant Vegetables in Bangladesh," July 26, 2021, https://www.cordaid.org/en/news/the-salt-solution-growing-salt-tolerant-vegetables-in-bangladesh/.

[58] NDC Action Project, "Climate Resilient Housing," accessed March 25, 2026, https://climate-ndc.brac.net; Shadma Malik and Sinchita Poddar, "Reducing climate vulnerability by building climate-resilient housing in coastal areas," *The Business Standard*, April 3, 2024.

and potentially lower carbon emissions by 0.83 million tons annually, with the help of Infrastructure Development Company Limited (IDCOL).[59] UNDP has supported solar-powered irrigation and renewable energy initiatives in Bangladesh to enhance climate change adaptation. These initiatives promote the use of solar energy for irrigation and rural energy supply, reducing dependence on fossil fuels, improving agricultural productivity, and strengthening vulnerable communities' resilience to climate-related challenges.[60]

(vi) Community-Managed Water Systems

In Bangladesh, community-managed water systems such as Pond Sand Filters (PSFs), rainwater harvesting, and community-led piped systems are essential for providing safe drinking water, especially in rural and coastal areas. By empowering local committees, often led by women, to oversee water infrastructure, these methods increase resilience to climate change and salinity.[61]

(vii) Early Warning Systems and Risk Mapping

Bangladesh has developed a robust, world-renowned Early Warning System (EWS) for cyclones and floods, utilising multi-channel dissemination (radio, mobile, sirens) and community-led preparedness initiatives, like the Cyclone Preparedness Programme (CPP)[62]. The national roadmap for the "Early Warnings for All (EW4All)" initiative (2025–2030) aims to bridge gaps in last-mile connectivity, improve forecasting accuracy, and address emerging hazards like lightning and landslides.[63]

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[59] Marie-Charlotte Buisson and Archisman Mitra, "When sun can dispel smoke: Solar irrigation and climate change in Bangladesh," PreventionWeb, April 3, 2021, https://www.preventionweb.net/news/when-sun-can-dispel-smoke-solar-irrigation-and-climate-change-bangladesh#:~:text=Reducing%20the%20risks%20for%20the,of%20more%20diversified%20cropping%20patterns.

[60] UNDP Bangladesh, "Building Climate Resilience Through Partnerships," August 27, 2025, https://www.undp.org/bangladesh/stories/building-climate-resilience-through-partnerships; UNDP Bangladesh, "Solar-based irrigation for climate resilience agriculture," June 15, 2021, https://www.undp.org/bangladesh/stories/solar-based-irrigation-climate-resilience-agriculture.

[61] Rafiqul Islam, "Community-based rainwater plants: a solution to coastal water woes," UNDP Bangladesh, November 17, 2022, https://www.undp.org/bangladesh/press-releases/community-based-rainwater-plants-solution-coastal-water-woes#:~:text=%2C%E2%80%9D%20he%20said.-,The%20GCA%20project%20empowers%20climate%20vulnerable%20coastal%20communities%2C%20especially%20women,upazilas%20of%20Khulna%20and%20Satkhira.; Solidaridad, "Community-led Water Management Offers a Blueprint for Resilient Agriculture," accessed March 23, 2026, https://www.solidaridadnetwork.org/news/community-led-water-management-offers-a-blueprint-for-resilient-agriculture/#:~:text=Women%20have%20also%20emerged%20as,saving%20and%20eco-friendly%20management

[62] Bangladesh Red Crescent Society, "Cyclone Preparedness Programme (CPP)," accessed March 28, 2026, https://bdrcs.org/cyclone-preparedness-programm-cpp/.

[63] United Nations Office for Disaster Risk Reduction, "Bangladesh: Advancing Early Warnings for All,"

These community-based climate change solution initiatives frequently engage and empower women and local institutions, promoting sustainable, inclusive adaptation strategies tailored to the needs of the most vulnerable communities. However, according to experts, climate change cannot be fought with one or two isolated projects; rather, it requires holistic climate solutions built on people, not projects.[64]

4.2 *The Concept of Global "Mutirão" and Bangladesh*

Bangladesh faces severe climate vulnerabilities, including cyclones, floods, salinity intrusion, drought, and sea-level rise, and has adopted a participatory, multi-stakeholder approach by mobilising government institutions, local communities, civil society, development partners, and international organisations for climate action. Bangladesh's response to climate change reflects a practical "Mutirão" approach, characterised by coordinated, multi-level, community-led initiatives grounded in indigenous knowledge and NbS. The country's proactive approach has been shaped by its high susceptibility to climate hazards, such as cyclones, riverine and flash floods, saline intrusion, and sea-level rise, which threaten lives and livelihoods, food security, and urban infrastructure. The indigenous peoples of Bangladesh also have various examples of collective social activities that demand inclusion in society, the state, and global processes.[65] The country's shared responsibilities and coordinated actions enhance resilience and advance progress towards Sustainable Development Goal 13 (SDG 13), or climate action. The country has adopted an integrated governance framework combining national policy initiatives with grassroots participation. National policy frameworks like the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) and the National Adaptation Plan (NAP) of Bangladesh, which provide sector-specific adaptation and mitigation strategies across agriculture, water resources, urban planning, and public health, are fundamental to this approach. These frameworks are complemented by efforts supported by the Green Climate Fund (GCF) and the Bangladesh Climate Change Trust Fund (BCCTF), which enable decentralised, locally-led solutions that address community-specific vulnerabilities. Early warning systems, cyclone shelters, climate-resilient crop varieties, and participatory disaster preparedness programmes demonstrate how local communities are mobilised to respond collectively to climate shocks at the grassroots level.

accessed March 26, 2026, https://www.undrr.org/implementing-sendai-framework/sendai-framework-action/early-warnings-for-all/bangladesh.

[64] Arafat Rahman, "We need a climate solution built on people, not projects," *The Daily Star*, November 23, 2026; Information collected from KII.

[65] Pavel Partha, "They invested the most for the world," *Prothom Alo*, November 17, 2025. (in Bangla)

Bangladesh is already acknowledged as a leader in Locally-led Adaptation (LLA), where the country has invested in vulnerable communities for enabling them to adapt to the adverse impacts of climate change.[66] At the national level, the country has institutionalised climate governance through comprehensive policy frameworks integrating mitigation, adaptation, and disaster risk reduction. National strategies have also been developed to mainstream climate considerations across sectors such as agriculture, water resources management, coastal protection, and urban planning. The integration of climate adaptation into national development planning demonstrates that collective institutional efforts can transform climate vulnerability into resilience-building opportunities. The coordinated actions among the ministries, local governments, and non-governmental organisations that create the collaborative governance structure promoted in these frameworks reflect the principles of "Mutirão". As Bangladesh has a long history of planning for adaptation to climate change and incorporating those plans into national development programmes, the country can share with other climate-vulnerable countries how to develop a national adaptation plan with a whole-of-society approach, which is essential for effectively implementing any plan.[67]

Another important dimension of Bangladesh's "Mutirão"-style climate action is community-based adaptation initiatives. Local communities play an important role in implementing adaptation measures like climate-resilient agriculture, mangrove restoration, community-based disaster preparedness, and early warning dissemination. These programmes are implemented through partnerships among local government institutions, NGOs, and community groups, enabling grassroots participation in climate decision-making and implementation. These participatory initiatives strengthen local communities' ownership of climate initiatives and ensure that solutions are designed to the socio-ecological realities of vulnerable regions, particularly in coastal and flood-prone areas. Although community-focused biodiversity conservation and climate change adaptation strategies do not appear as sustainable as expected, they have been widely employed in Bangladesh for quite some time.[68]

Bangladesh's climate actions demonstrate strong collaboration with international partners, reflecting the global dimension of the "Mutirão" concept. To support adaptation and resilience initiatives, the country has actively participated in international climate diplomacy and leveraged global climate financing mechanisms.

[66] Saleemul Huq, "Bangladesh can be the global lab for climate solutions," *The Daily Star*, September 13, 2022.
[67] Saleemul Huq, "Locally-led adaptation: We can lead the world," *The Daily Star*, February 15, 2022.
[68] Shekhar R Biswas, "Want to save biodiversity? Look to locally-led approaches," *The Daily Star*, October 20, 2022.

Initiatives ranging from improving coastal embankments to building climate-resilient infrastructure and ecosystem-based adaptation have received support from development partners, multilateral organisations, and climate funds. These collaborations strengthen the country's collective response to climate concerns by facilitating financial support, technology transfer, and knowledge exchange. Although there is no clear outline for fossil fuels at COP30, the announcement to increase funding for developing countries to tackle the effects of climate change was the biggest achievement of the conference. Bangladesh can also benefit from this funding for its energy transition initiatives.[69] The intensified focus on adapting the Global "Mutirão" concept could also be beneficial for the country's climate adaptation initiatives.[70]

Locally-led collective initiatives in climate change solutions play a crucial role in building resilience, but they also face notable limitations. These initiatives often operate with limited financial resources and technical capacity, and uneven institutional support, which restricts their scalability and long-term sustainability. In many cases, they remain fragmented and dependent on short-term project funding, making it difficult to integrate into broader national or global adaptation strategies. Additionally, local initiatives may struggle to address large-scale climate risks, such as transboundary flooding or sea-level rise, without stronger coordination and external investment. However, these approaches closely align with the "Mutirão" concept through their emphasis on collective action, shared responsibility, and locally grounded solutions. The "Mutirão" framework seeks to overcome these limitations by embedding community-driven efforts within wider networks of support, finance, and multilevel cooperation, thereby transforming isolated local practices into part of a coordinated global response to climate change.

The climate governance of Bangladesh illustrates how the "Mutirão" approach can be operationalised through coordinated policies, community engagement, and international cooperation. Although not explicitly framed in terms, the climate governance framework of Bangladesh meaningfully reflects the principles of "Mutirão", which is rooted in collective action, shared responsibilities, and community-driven solutions. The country's approach, which integrates strong grassroots participation guided by national policies, has created a hybrid governance model that closely aligns with the "Mutirão" spirit. For example, community-based adaptation initiatives, locally-led disaster risk reduction, and participatory water and agricultural management systems demonstrate how local knowledge and collective labour are mobilised to address climate vulnerabilities. The climate strategies of Bangladesh, like BCCSAP, NAP, and NDCs, promote

[69] Information collected from KII.
[70] Information collected from KII.

decentralisation and active involvement of NGOs and vulnerable communities, especially in high-risk, climate-vulnerable areas. Local governments and civil society work together to implement adaptation measures, often in partnership with external actors. This bottom-up, collaborative approach reflects the "Mutirão" concept by encouraging shared responsibility and collective resilience. The climate governance architecture, including the NAP and the updated NDC 3.0, reflects an advanced and proactive perspective among developing countries, albeit its functionality is shaped by both institutional strengths and persistent structural constraints. NAP promotes climate-resilient development across key sectors and emphasises locally-led adaptation aligned with national strategies. However, its impact is constrained by weak subnational implementation capacity, fragmented inter-ministerial coordination, and limited integration into budgetary processes.[71] The country's NDC 3.0 reflects greater ambition in mitigation and adaptation, but its implementation largely depends on external climate finance and technological support.[72] The major challenge in Bangladesh's climate governance lies in the gap between strong policy design and weak implementation, compounded by evolving monitoring and limited access to consistent international finance. Overlaps between NAP, NDC 3.0, and other frameworks create institutional duplication and coordination issues. As a result, despite being ambitious and progressive, governance effectiveness is constrained by resource dependence and implementation bottlenecks.

The experience of the country in adapting to climate change-induced challenges highlights the importance of collective responsibilities and shared actions in addressing climate risks in highly vulnerable contexts. By integrating national policy frameworks with grassroots participation and global partnerships, Bangladesh demonstrates a practical model of collaborative climate action that contributes not only to national resilience but also to broader global efforts toward sustainable development and climate justice. The principles outlined in the Global "Mutirão" concept are particularly significant for Bangladesh, a country striving to progress and highly susceptible to the adverse impacts of climate change. Bangladesh is at the intersection of global responsibility and local resilience as one of the most vulnerable countries, which makes a negligible contribution to global GHG emissions. The country's development trajectory depends primarily on international cooperation, technology transfer, climate funding, and equitable global partnerships, especially for achieving the Sustainable Development Goals (SDGs).

[71] Ministry of Environment, Forest and Climate Change, *National Adaptation Plan of Bangladesh (2023-2050)* (Dhaka: Ministry of Environment, Forest and Climate Change, 2022).
[72] Ministry of Environment, Forest and Climate Change, *Bangladesh's Third Nationally Determined Contributions (NDC 3.0)* (Dhaka: Ministry of Environment, Forest and Climate Change, 2025).

Although Bangladesh has achieved significant domestic mobilisation in social resilience, community-based adaptation, and disaster risk reduction, national efforts alone cannot address structural issues, including financial deficiencies, climate-induced displacement, and loss and damage from climate change. The paradigm of Global "Mutirão" becomes both normative and practical as it advocates a global response grounded in inclusive governance, shared accountability, and climate justice. The idea of "Mutirão" is not new to Bangladesh; rather, it reflects the current blend of innovation, solidarity, and resilience of the people at the grassroots level of the country.

5. Conclusion

By emphasising the collective effort, shared responsibilities and cooperation among stakeholders, including the government, local communities, civil society and international partners, the concept of Global "Mutirão" reflects an important perspective of inclusive and effective solutions to the adverse impacts of climate change. The concept demonstrates that climate change cannot be addressed by isolated efforts; rather, coordinated actions among multiple levels of governance and the involvement of grassroots communities are essential for achieving sustainable outcomes. The Global "Mutirão" concept is highly compatible with modern frameworks for climate governance that emphasise on cooperation, community participation, and knowledge sharing.

The Global "Mutirão" should be considered as a potential framework for greater cooperation and cohesiveness in addressing climate change challenges, rather than merely a new buzzword. However, how the concept is translated from a conceptual narrative into practical policies and quantifiable outcomes will determine its usefulness. The concept risks becoming merely another rhetorical addition to the already overloaded realm of climate initiatives in the absence of clearly defined institutional frameworks, accountability mechanisms, and financial commitments. Therefore, the effectiveness of the Global "Mutirão" concept depends on the ability to go beyond conventional symbolic language and demonstrate tangible outcomes in resilience-building, adaptation, and climate mitigation. More inclusive and community-driven solutions and improved collective climate governance could be achieved if the concept is successfully operationalised. Otherwise, it might remain as an ideal idea in global climate discourse. It is imperative to ensure that the spirit of "Mutirão" translates into effective and accountable global climate action.

Bangladesh provides an excellent example of how the spirit of the Global "Mutirão" can translate into effective climate action. The nation has developed a comprehensive strategy to combat climate change through strong government

commitments, community engagements, and cooperation with foreign development partners. Together, national policies, LLA programmes, and knowledge-sharing mechanisms reflect how stakeholders may collaborate to improve climate resilience and promote sustainable development. The idea of a Global "Mutirão" provides Bangladesh with a conceptual framework for promoting strong, inclusive, and collective international action proportionate to the scale and severity of the climate challenge. The Global "Mutirão" offers Bangladesh an opportunity to connect its domestic initiatives and regional adaptation strategies to a broader global movement. However, there are still many obstacles to overcome, such as resource scarcity, gaps in technological advancement, and intensifying climate change challenges. Stronger institutional coordination, persistent global support, and stronger exchange of knowledge and information will be necessary to maintain and expand these integrated efforts. The experiences of Bangladesh indicate that inclusive government and practical cooperation can make the Global "Mutirão" concept a reality rather than a mere theory. Bangladesh may continue to offer significant perspectives on practical and equitable climate solutions by further developing this collective approach.