

Localising the Indicators of Global Goals on Adaptation

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SUMMARY

This policy outlines the necessity and strategy for systematically integrating Locally-Led Adaptation (LLA) principles into the measurable indicators of the Global Goal on Adaptation (GGA), adopted as the "UAE Framework for Global Climate Resilience." The GGA aims to bolster adaptive capacity and resilience globally, particularly for vulnerable developing nations. However, its effectiveness hinges on operationalizing its broad thematic and functional targets at the community level. Analysis shows only 35 percent of the proposed 100 GGA indicators directly align with LLA principle. 60 percent show potentially alignment and 5 percent show none. Strongest alignment is observed in poverty eradication and livelihoods (80%) and cultural heritage and knowledge (75%), while implementation (20%), infrastructure and settlements (29%), and monitoring, evaluation, and learning (0%) remain weak. Better integration of LLA enablers into the GGA indicators is needed if the global goal is going to reflect LLA. Participatory design, disaggregated data, and transparent finance channels should be prioritized to reach local actors with resources and decisions relevant. This policy brief lays out a shift in indicator finalization to ensure that global accountability mechanisms genuinely reflect the experiences, knowledge, and priorities of local communities, women, youth and marginalized groups, who are on the frontline of climate impacts.

DECODING THE GLOBAL GOAL ON ADAPTATION

The Global Goal on Adaptation (GGA) under the Paris Agreement seeks to enhance adaptive capacity and resilience to climate change, focused on supporting developing countries and promoting the integration of Indigenous and local knowledge, the protection of their rights, and meaningful community participation in adaptation decision-making. Adopted at COP28 as the UAE Framework for Global Climate Resilience, the GGA divides the targets into two categories: Thematic Targets (seven key sectors, under paragraph 9, [9a to 9g]) and Dimensional Targets (four stages of the adaptation cycle, under paragraph 10 [10a to 10d]).

Linking LLA & Thematic targets of GGA

The thematic targets are: **water, health, food and agriculture, ecosystems and biodiversity, infrastructure and human settlements, poverty and livelihoods, and cultural heritage**. LLA principles ensure these targets are grounded in local realities, knowledge, and priorities¹. Devolving decision-making and leveraging indigenous knowledge supports food security and climate-resilient agriculture². Robust understanding of climate risks helps protect ecosystems, enhance biodiversity management, and address vulnerabilities in agriculture and water sectors³. Investments in local capacities and flexible programming boost economic resilience⁴ and sustainable infrastructure⁵, while integrating cultural knowledge and ecosystem protection reinforces biodiversity and collective community resilience.

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2. Dev, C., & Rashid, M. J. (2024). Resilience in action: Implementing locally-led adaptation in Bangladesh. Climate & Development Knowledge Network. <https://cdkn.org/story/resilience-action-implementing-locally-led-adaptation-bangladesh>

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COP29 advanced work on developing quantifiable indicators to enable effective transparent tracking and effective implementation .As the proposed list of indicators have been streamlined to 100 by experts under GGA, it is important to ensure that they reflect ground realities and can be applicable in measuring locally-led adaptation outcomes too. Locally-Led Adaptation (LLA), which has been at the center of localising global commitments and national priorities, focuses on empowering affected communities—especially Indigenous peoples, women, youth, and other marginalised groups—with resources, leadership, and control over adaptation decisions.

LLA Principles

- 1. Devolving decision-making to the lowest appropriate level
.....
- 2. Addressing structural inequalities faced by women, youth, children, the disabled, displaced, Indigenous Peoples, and marginalized ethnic groups
.....
- 3. Providing patient and predictable funding that can be accessed more easily
.....
- 4. Investing in local capabilities to leave an institutional legacy
.....
- 5. Building a robust understanding of climate risk and uncertainty
.....
- 6. Flexible programming and learning
.....
- 7. Ensuring transparency and accountability
.....
- 8. Collaborative action and investment

Linking LLA & Dimensional targets of GGA

The **dimensional targets** of the adaptation cycle are **assessment, planning, implementation, and monitoring, evaluation, and learning**. LLA strengthens progress towards these targets with participatory approaches guiding risk assessments, adaptation planning, and implementation, ensuring inclusive, gender-responsive, and locally owned actions. In monitoring, evaluation, and learning (MEL), LLA promotes learning through feedback loops and local accountability mechanisms, empowering communities to track progress and inform national strategies.

Integrating these principles into GGA can help translate the high-level global targets into tangible, inclusive, and context-specefic actions. By embedding LLA and its principles into the GGA indicators and their implementation, countries can ensure that adaptation is equitable, accountable, and truly resilient, while delivering both systematic transformation to the communities at the forefront of climate change vulnerability. Examining the linkages between LLA and the thematic and functional targets of GGA can help underscore pathways for synergies between global priorities and local realities.

ANALYSIS ON LLA ALIGNMENT OF THE PROPOSED GGA INDICATORS

The International Centre for Climate Change and Development (ICCCAD) conducted a study to examine possible pathways of integrating LLA in the GGA process. As part of this study, ICCCAD first developed adaptation enablers through mapping globally and nationally recognised adaptation frameworks. These frameworks helped identify institutional, financial, technical, and socio-cultural enablers. The enablers were then validated through examining locally implemented adaptation interventions. Finally, the proposed indicators under the GGA process were closely assessed and reviewed, using the enablers as an analytical bridge to examine interlinkages and compare the “Consolidated list of indicators” for the Global Goal on Adaptation (GGA) with locally led adaptation (LLA) principles. The alignment of each indicator with LLA was systematically evaluated, and pathways were proposed to strengthen their local relevance and implementation when alignment was only partial. Refer Figure 1 below for the detailed methodological processes. To further align GGA with LLA, ICCCAD developed these enablers to ensure that adaptation is context-specific, actionable, and effective, grounding indicator selection and adaptation planning in local realities and needs. These enablers were then used to create a beneficiary-focused questionnaire designed to capture the most relevant and impactful adaptation measures based on local experience.

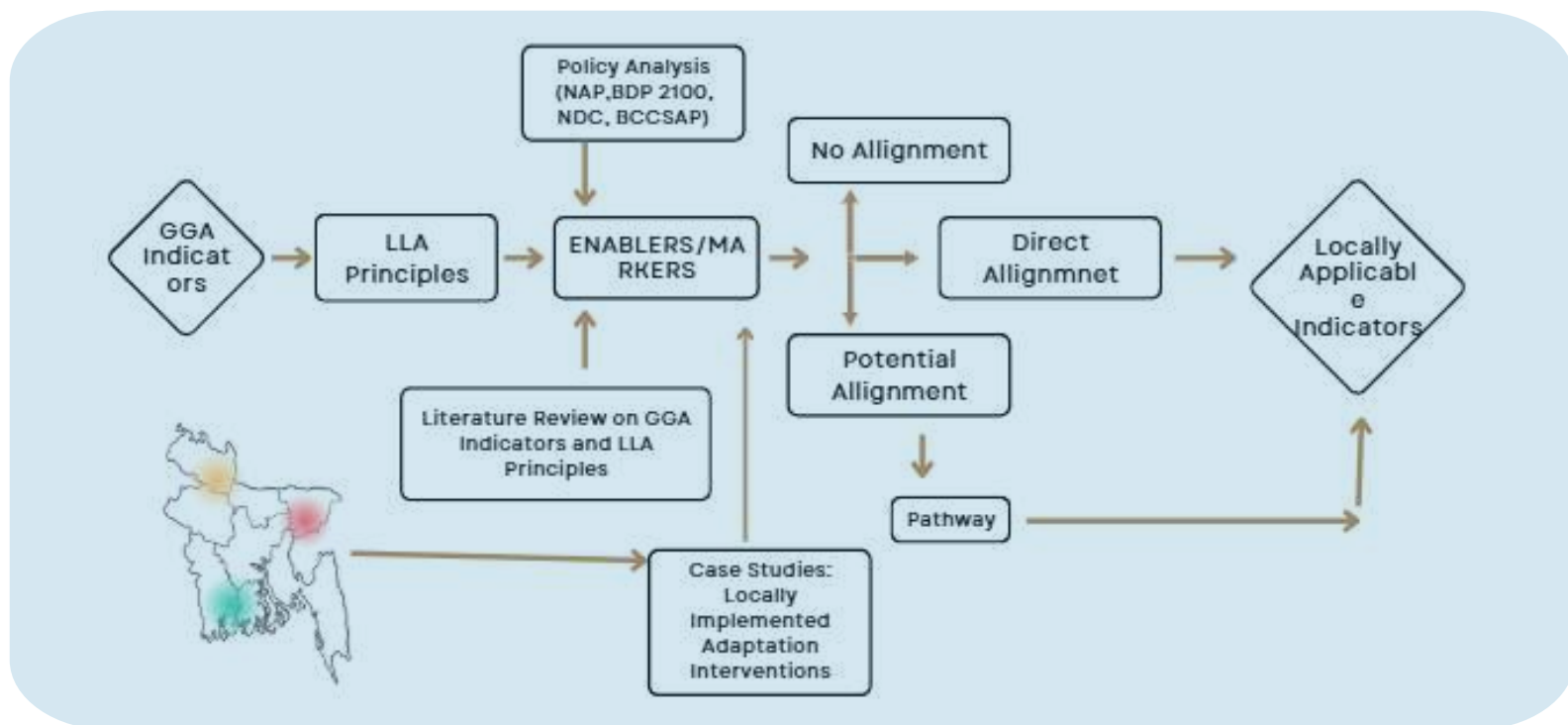


Figure 1: Methodological framework of the study

METHODOLOGY

The analysis followed a five-step process to align Global Goal on Adaptation (GGA) indicators with the Principles of Locally Led Adaptation (LLA).

1. Identifying Enablers: A review of literature and policy documents helped identify key enablers of LLA, including local governance, responsiveness to community needs, knowledge sharing, and strong monitoring systems.

2. Case Study Selection and Field Engagement: Locally implemented adaptation projects aligned with LLA principles and National Adaptation Plan (NAP) priorities were selected to validate these enablers through field surveys and interviews, capturing local decision-making, capacities, and vulnerabilities.

3. Data Analysis and Indicator Mapping: Field data were analysed to assess adaptation patterns and measure how global indicators align with local enablers.

4. Localising Indicators: Each GGA indicator was reviewed against the eight LLA enablers and categorised as Direct, Potential, or No Alignment, with clear justifications for each.

6. Developing Pathways and Validation: Pathways were proposed to increase alignments that were categorised as potential, and selected indicators were validated against case studies from three field interventions.

The degrees of alignment with LLA were defined as follows:

Direct Alignment: The indicator inherently satisfies the adaptation enablers without requiring modifications or additional contextualization.

Potential Alignment: The indicator has potential to adhere to one or more of the finalised enablers but only if specific additional criteria are met (e.g., disaggregation, local integration, or participatory processes).

No Alignment: The indicator does not adhere to any of the enablers and would require fundamental changes to do so, without any relevance to LLA tracking.

LOCAL CASE STUDIES

Mapping adaptation interventions capturing regions with key climatic vulnerabilities. They need to embed LLA principles and also aligned with national priorities

✔ Reviewing existing policy documents, including the Bangladesh Climate Change Strategy and Action Plan (BCCSAP), 2009; Bangladesh Delta Plan, 2100; NDCs and NAPs; and literature on LLA initiatives, approaches, and community experiences to develop questionnaires that would inform the enablers and data collection.

✔ Consulting key informants and examining project documents to understand the landscape of adaptation interventions in the nexus of LLA and national priorities.

✔ **Ecosystem-based Adaptation (EbA), Extended Community Climate Change, and Strengthening Livelihood Security of the Climate Change Vulnerable** were the three projects selected by ICCCAD to highlight adaptation practices in key local contexts across Bangladesh. These initiatives not only strongly embedded LLA principles but also aligned with Bangladesh’s NAP goals. The collected data provided deeper insight into how LLA can be integrated into broader GGA indicators and how practical local case studies can inform them.

Summary of Adaptation Projects Feeding into Case Studies

Project	Implementing / Executing Partners	Target Area / Beneficiaries	Key Adaptation Strategies / Interventions
Community based management of Tanguar Haor Wetland Ecosystems	Department of Environment, Partners: BFD, DAE, DoF, DLS, BPC, LGED, LGIs, BWDB and Deparmtne of Bangladesh Haor and Wetland Development(D BH&WD)	Tanguar Haor (9727 Hectares), Tahirpur and Madhyanagar Upazila of Sunamganj District	Updated Resource Map and Database System; Valuation of Ecosystem Services; Development of Integrated Conservation Management Plan; Community Based Biodiversity Register; Swamp plantation along the 24 km strip of Kanda and Beel Habitat restoration; Ten Sanctuary Development for fish and other aquatic biodiversity restotration; 300 hectares of reed swamp restoration; 800 hectares critical aquatic habitat restoration for birds; 380 HHs for Alternative Income Generation;
Extended Community Climate Change Project – Flood (ECCCP-Flood)	PKSF (Executing); 11 Local Partner Organizations	5 districts: Nilphamari, Lalmonirhat, Kurigram, Gaibandha, Jamalpur; poor & ultra-poor households, focus on women-headed households	Formation of CCAGs, participatory vulnerability assessments, raised homesteads & climate-resilient houses, WASH interventions, flood-tolerant crops, livelihood diversification
Strengthening Livelihood Security of Climate Change Vulnerable People (LEDARS Project)	LEDARS	Communities in flood-prone and saline-affected areas; marginalized groups, women, and youth	Saline-tolerant crops, zero-tillage farming, organic fertilizers, water & salinity management, resilient housing & infrastructure, participatory planning & monitoring,

KEY FINDINGS

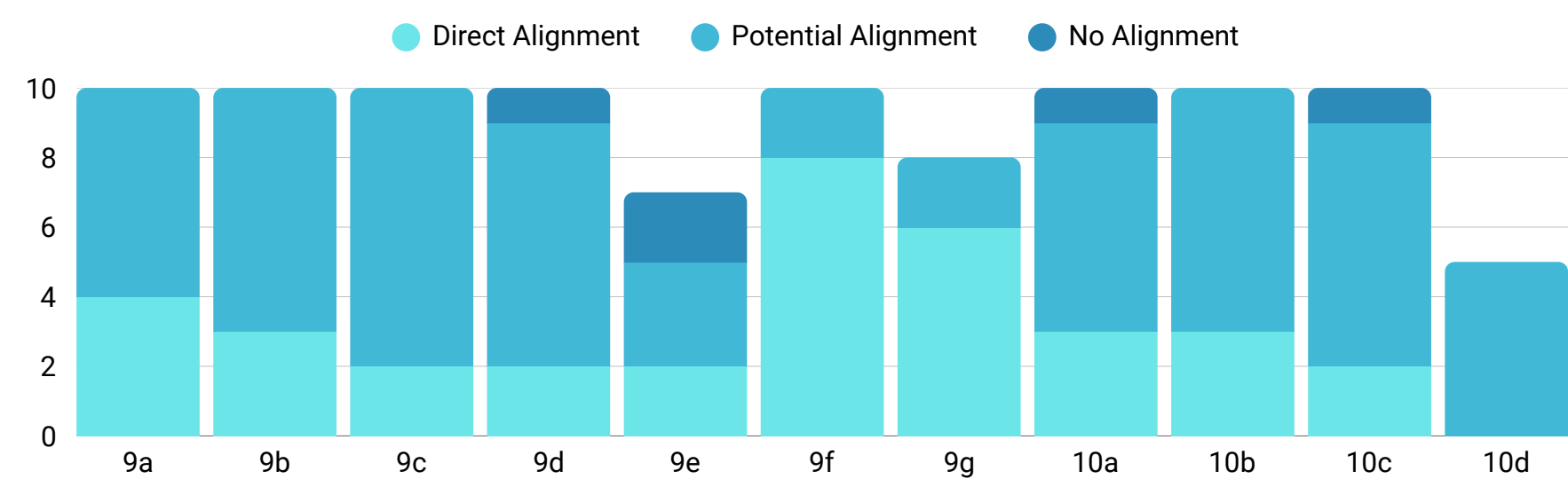
The comparative analysis of the Global Goal on Adaptation (GGA) indicators against Locally-led Adaptation (LLA) principles demonstrates clear patterns of alignment, partial inclusion, and systemic exclusion of locally grounded adaptation. Out of 100 shortlisted indicators, 39 percent were directly aligned, 52 percent were potentially aligned, and 9 percent showed no alignment.

Summary of Alignment

Target	Total no. of indicators	Degree/Type of Alignment		
		Direct Alignment	Potential Alignment	No Alignment
9a. Water supply and sanitation	10	4	6	0
9b. Food and agricultural production	10	3	7	0
9c. Health impacts and health services	10	2	8	0
9d. Ecosystem and Biodiversity	10	2	7	1
9e. Infrastructure and human settlements	7	2	3	2
9f. Poverty eradication and livelihoods	10	8	2	0
9g. Cultural heritage and knowledge	8	6	2	0
10a. Impact, vulnerability, risk assessment	10	3	6	1
10b. Planning	10	3	7	0
10c. Implementation	10	2	7	1
10d. Monitoring, evaluation, and learning	5	0	5	0
Total no. of indicators	100	35	60	5

The table highlights that while nearly four in ten indicators (35 indicators among 100) already embed LLA principles, more than half (60 indicators among 100) require adjustments such as disaggregation or participatory design to fully reflect local priorities. Only a small fraction—less than one in ten—show no alignment with the LLA framework, generally due to a top-down or highly technical orientation.

Across thematic areas, the strength of alignment varies considerably. Indicators that measure safe and resilient water access, food security, climate-resilient agriculture, health, infrastructure, social protection and cultural heritage - reflect stronger alignment with LLA. Direct alignment could be attributed to indicators capturing local governance, participatory design, and community-led interventions. Outcome-based metrics remain insufficient without disaggregation while highly technical indices exclude community perspectives, illustrating systemic misalignment.



Indicators focusing on social protection and financial inclusion resonate with LLA, evidenced by the ECCCP-Flood project’s flood-resilient housing and livelihood interventions. Yet, poverty incidence and insurance coverage metrics lack perspectives of marginalised groups. Inclusive relocation protocols and locally co-designed housing indicators demonstrate strong LLA alignment, while indicators limited to national or transboundary planning exclude community voices.

Indicators tracking finance, economic losses, or aggregate outcomes rarely capture whether resources reach communities; with budgetary and procurement-related indicators often remaining top-down unless explicitly disaggregated to reflect local priorities. Positive exceptions include capacity-building measures (e.g., training CBOs under EbA projects in Barind and Haor) that explicitly mention community actors. Gender-responsive and Indigenous knowledge-informed indicators show strong LLA compatibility, as do those requiring local government integration. None of the MEL indicators show direct alignment due to focus on national reporting requirements. Local integration is limited but achievable, as evidenced by LEDARS' community-driven MEL systems, which improved accountability and adaptive learning.

POLICY IMPLICATIONS

✔ Integrating LLA principles into indicator finalization is crucial. This policy brief uses the LLA principles as a mandatory analytical lens for the final adoption and application of GGA indicators:

- **For Indicators with Potential Alignment:** The standardized pathways need to be adopted to modify these indicators. This includes making disaggregation, local integration and participatory design compulsory conditions for their use in national and international reporting.
- **For Indicators with No Alignment:** A fundamental review is required to either replace these indicators with locally relevant alternatives or mandate the integration of a supplementary, LLA-aligned metric alongside the technical one.

✔ Strengthening thematic alignment is another important issue. Policy must capitalize on areas of strong alignment while actively rectifying gaps in weaker areas:

- **Leveraging Strong Alignment (e.g., Poverty, Cultural Heritage, Water):** Policy should prioritize and scale up investment in community-driven solutions validated by LLA, such as decentralized, locally managed water access systems and the integration of Indigenous knowledge in resilient housing design.

✔ Rectifying Weak Alignment is the necessity (e.g., Implementation, Ecosystems, Infrastructure):

- **Finance and Implementation:** Require indicators tracking finance flows to capture the proportion of funds directly accessible to local actors and community-based organizations (CBOs), moving away from solely tracking aggregate financial or economic loss metrics.
- **Infrastructure:** Mandate the inclusion of inclusive relocation protocols and indicators that track locally co-designed and culturally appropriate housing solutions, moving beyond national-level planning metrics.

✔ Institutionalizing Community-Led Monitoring, Evaluation, and Learning (MEL). The weak alignment in MEL necessitates a policy intervention to decentralize accountability.

- **Mandatory Local MEL Component:** National Adaptation Plans (NAPs) and other adaptation strategies must incorporate community-driven MEL systems that empower local actors to evaluate progress, provide feedback, and hold decision-makers accountable.
- **Feedback Loops:** Establish transparent and formal mechanisms for feeding community-led MEL data directly into national reporting, policy adjustments, and adaptation resource allocation processes.

✔ The final list of GGA indicators for national implementation, need to undergo a local validation process to ensure they reflect the priorities, risks, and aspirations of affected communities, particularly marginalized groups:

- **Capacity Building:** Invest in training local governments, CBOs, and civil society on the application of LLA principles and data collection for disaggregated, equity-focused indicators.
- **Reporting:** National communications and biennial transparency reports must explicitly detail how LLA principles have been embedded in the selection and application of indicators, providing qualitative evidence of participatory processes alongside quantitative data.

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