Policy Discussion Framework for Teacher-Responsive, Climate-Smart Education Systems

[Draft - 20 Sept 2024]

Greening Education Partnership Working Group #3: Greening Teacher Training and Education Systems' Capacities

1. Context

As the planet warms and ecosystems are pushed to the brink by human-induced climate change and environmental degradation, the resilience of global education systems are under immediate and severe strain.¹ The increasing frequency and intensity of climate-related events such as floods, droughts, and heatwaves—and the disruption to learning continuity, damage to infrastructure, and unsafe learning environments²–threaten the fundamental right of every child to access equitable education.³ Worse, these climate-related impacts are particularly felt by education systems in communities with fewer resources to respond to a crisis they largely bear no blame in creating.⁴

Addressing climate change's impacts on the education system demands a comprehensive, transformative response.⁵ Educators are critical actors in this transformation. Serving both as facilitators of learning and as crucial links between educational outcomes and broader community prosperity, they shoulder the complex responsibility of preparing children for their uncertain future while addressing their immediate academic and psychosocial needs in the present. The dual nature of their role places educators in a unique position to lead both in crisis management and in the development of sustainable adaptation strategies. However, despite their critical role, educators often find themselves unsupported by existing frameworks and policies that tend to be uncoordinated and inconsistent⁶, leaving their potential contributions to policy discussions unrealized.

¹ IPCC (2022). Climate Change 2022: Impacts, Adaptation, and Vulnerability. Summary for Policy Makers.

 $^{^2}$ UNICEF (2019). It Is Getting Hot: Call for Education Systems to Respond to the Climate Crisis.

³ UNICEF, The Climate Crisis Is a Child Rights Crisis.

⁴ IPCC (2022).

⁵ Global Partnership for Education (GPE) (2023). *Towards Climate-Smart Education Systems: A 7-Dimension Framework for Action*.

⁶ Geneva Global Hub for Education in Emergencies. (2023). *EiE, Displacement, and Migration*.

Swift action by policymakers is essential to enhance the climate responsiveness of education systems in ways that prioritize the well-being and resilience of teachers. As key agents of change, teachers require robust support tailored to meet their varied and often overlooked needs, including professional development opportunities, access to mental health resources, and safe, climate-resilient facilities.⁷ Effective climate-smart education policies must be deeply rooted in the everyday experiences of educators, especially those in the most impacted regions. Discrepancies between the intended scope of policies and the actual challenges faced by teachers not only undermine the effectiveness of these measures but also jeopardize the well-being and professional stability of the educators who are essential to driving positive educational outcomes.

2. Overview of the Tool

Introduction

The Policy Dialogue Tool is designed to empower MoEs to engage in structured and meaningful discussions about the policy considerations which underpin efforts to prepare education systems to effectively address the impacts of climate change and environmental degradation. Recognizing the critical role of educators in both experiencing *and* addressing these impacts, this tool strategically places teachers at the center of the policy dialogue, thereby ensuring their insights and needs are maximally considered when developing climate-responsive education policies.

Designed to systematically incorporate teachers' perspectives and needs, this tool guides MoEs through a process that assesses policies that directly impact teachers' working conditions, safety and well-being, and professional effectiveness. Central to this process are questions and reflection probes, the creation and curation of which was informed by a robust consultative process with teachers directly. As a result, the issues tackled by the tool are those that educators themselves have identified as most critical to their personal and professional lives, ensuring that any policies that come out of these discussions are both relevant and effective.

The Seven Dimensions

To guide these critical conversations, the tool is structured around seven key dimensions of any education system, with each dimension serving as an entry point for climate action.⁸ Each element of a system must be aligned with and reinforced by other aspects of the

⁷ Education International (EI) (2021). *Manifesto on Quality Climate Change Education for All.*

⁸ GPE (2023).

system, working together in tandem to ensure coherence in addressing the manifold, complex challenges posed by climate change.

The tool comprises seven distinct subsections, each corresponding to a specific dimension of a climate-smart education system.

- 1. Data and Evidence
- 2. Policy and Planning
- 3. <u>Coordination</u>
- 4. Finance
- 5. Infrastructure
- 6. <u>Teaching and Learning</u>
- 7. <u>Schools and Communities</u>

Each subsection includes:

- A brief **framing** designed to enhance understanding of each dimension and set the stage for the discussions that follow.
- A list of **key considerations** formulated to stimulate strategic thinking and reflective analysis to push policymakers to critically assess existing policies and practices to identify low-hanging fruit for action.
- A **checklist for action** to help translate the discussions into practical steps needed to bolster climate resilience across the entirety of an education system.

Dimension 1

Data and Evidence

Introduction

Ministries of Education face the dual challenge of responding to immediate climate-related disruptions—such as extreme weather, school closures, and teacher absenteeism—while also planning for long-term resilience. Teachers, who often experience these disruptions firsthand, are critical to maintaining educational continuity, yet the impacts they face are not always captured through existing data systems.

To develop policies that effectively support teachers and strengthen the education system, Ministries need to gather climate-related data that reflects the realities teachers encounter. Even without advanced data systems, Ministries can begin by collecting basic, actionable data from local education offices, partnering with climate and environmental agencies, and ensuring that teachers in vulnerable regions receive the support they need.

The following reflective prompts and checklist items are designed to facilitate discussions within Ministries of Education on key efforts related to **Data and Evidence**, such as:

- Identifying vulnerable teacher populations in climate-sensitive areas.
- Developing partnerships to enhance data collection and support systems for teachers.
- Using climate data to inform policies that protect teachers' working conditions and improve resilience.

- 1. What climate-related data can be gathered to understand the impact on teachers?
 - a. Checklist Items:
 - Can we mandate that regional or local education offices collect and report data on teacher absences, school closures, and classroom disruptions due to climate events?
 - Is there a system in place for collecting and aggregating teacher feedback on climate impacts, even if it's through basic reporting methods?
 - How can we ensure that the data we collect is being used to inform national education planning and resource allocation?
 - What immediate steps can we take to start tracking key data (e.g., the number of climate-related school closures each year) to gradually build more comprehensive data?
- 2. How can available data help identify and prioritize support for vulnerable teachers (e.g., by location, gender, or disability)?
 - a. Checklist Items:

- Can we start by mapping which schools are in high-risk climate zones (e.g., coastal areas prone to flooding)?
- Have we assessed existing demographic data (e.g., teacher location, gender, and disabilities) to identify which teachers are most vulnerable to climate risks?
- How can the Ministry allocate resources or develop specific interventions for teachers in high-risk areas based on this data?
- Can we incorporate climate vulnerability data into national teacher deployment or resource distribution plans?

3. What partnerships can the Ministry establish to enhance climate data collection and better support teachers during climate-related events?

- a. Checklist Items:
 - Can we formalize partnerships with local agencies, national meteorological offices, or civil society organizations to receive climate data that helps us understand risks to teachers and schools?
 - How can we coordinate with other government ministries (e.g., environment, health) to ensure climate and disaster data is shared with the education sector?
 - Are there opportunities to collaborate with international organizations or regional partners to build our capacity for climate data collection and analysis?

4. How can climate data be integrated into national policies to improve teacher resilience and working conditions?

- a. Checklist Items:
 - How can the Ministry use climate data to revise policies related to teacher safety, job stability, and resource distribution in climate-sensitive areas?
 - Can we create a national guideline or protocol for school safety and teacher support during climate emergencies, based on data-driven insights?

5. What systems can be established to regularly review climate impacts on teachers and ensure policies are updated accordingly?

- a. Checklist Items:
 - Can the Ministry set up a regular review process to evaluate the effectiveness of current policies based on new climate data and teacher feedback?
 - How can we ensure that teacher feedback is systematically gathered after major climate events and integrated into policy updates?
 - Is there a national mechanism in place for monitoring and adjusting education policies to reflect evolving climate risks and teacher needs?
- 6. How can research on climate impacts be used to inform long-term education policy planning?
 - a. Checklist Items:

- How can the Ministry participate in or commission research to understand the long-term impacts of climate change on the teaching workforce?
- Are we reviewing relevant research or data from other sectors (e.g., health, environment) to inform how we develop education policies related to climate adaptation?
- How can we incorporate international research findings or best practices into national education strategies to strengthen climate resilience?

Dimension 2

Policy and Planning

Introduction

Education policies must be developed to ensure that teachers are fully equipped and supported to respond to climate-related challenges. These policies should protect teachers from the physical impacts of climate change while also addressing their psychosocial well-being and professional stability. As educators face mounting pressures—such as school closures, hazardous working conditions, and student absenteeism due to climate disruptions—ministries must consider how these challenges affect teachers' ability to provide effective instruction and maintain a stable learning environment.

At the same time, education policies must align with national and cross-sectoral climate strategies—such as Nationally Determined Contributions (NDCs), National Adaptation Plans (NAPs), and disaster risk reduction frameworks. This ensures that education is recognized as a critical component of national climate resilience efforts. Ministries of Education play a key role in integrating education priorities into these broader strategies, making sure that schools and teachers are considered in climate planning and that teacher-specific needs are addressed as part of national adaptation and mitigation agendas.

Teachers play a vital role in this process, both as educators and as community leaders who help students and families adapt to the realities of a changing climate. For policies to be truly effective, they should be shaped by those who experience climate disruptions firsthand—teachers themselves. Ministries of Education must engage teachers as key stakeholders in the development of climate-responsive policies, ensuring that their insights and experiences inform strategies that are practical and impactful.

Establishing formal mechanisms for policy dialogue—such as teacher unions, associations, and advisory panels—ensures that teachers have structured opportunities to contribute to climate policy development. Involving educators in this process is essential for crafting policies that are feasible and responsive to the realities of teaching in climate-sensitive regions.

The following reflective prompts and checklist items are designed to facilitate discussions within Ministries of Education on key efforts related to **Policy and Planning**, such as:

- Developing policies that address both climate resilience and teacher well-being, ensuring that teachers are prepared, supported, and empowered in their roles.
- Engaging teachers in the policy-making process, ensuring that their voices are heard and their experiences are incorporated into climate strategies.
- Monitoring and adapting policies to provide equitable support for teachers in vulnerable regions and ensure that policies remain responsive to emerging climate risks.

Key Questions

- 1. How can the Ministry ensure that national and subnational education policies protect teacher well-being and help schools prepare for, adapt to, and recover from climate-related events?
 - b. Checklist Items:
 - Are clear objectives related to climate resilience (i.e., the ability to prepare for, adapt to, and recover from climate-related events like floods, storms, or heatwaves) and teacher well-being included in national education policies and strategies?
 - Are clear actionable climate resilience and teacher support strategies outlined in education sector plans (e.g., concrete steps for addressing teacher safety in disaster-prone areas)?
 - Does the Ministry work with other government bodies (e.g., disaster management agencies, ministries of environment) to integrate education priorities into national climate plans (e.g., Nationally Determined Contributions, National Adaptation Plans) and ensure teacher-specific needs are addressed?

2. How can the Ministry include teachers' perspectives in developing and implementing climate-responsive education policies?

- a. Checklist Items:
 - Have teacher unions and associations been involved in discussing climate impacts and suggesting improvements for how schools and teachers can better prepare for and respond to climate-related disruptions?
 - 1. If formal teacher unions do not exist, can the Ministry establish a task force or advisory panel of teachers from different regions to provide feedback on climate impacts?
 - Is there a structured feedback system where teachers can report how climate conditions (e.g., poor air quality, extreme heat) are affecting their teaching environments and their students' learning?
 - Are there formal mechanisms (e.g., regular teacher forums, climate advisory panels with teacher representatives) where teachers can contribute to climate-related policy development?

3. How can the Ministry adjust education sector plans to respond quickly to new climate risks and teachers' changing needs?

- a. Checklist Items:
 - Does the Ministry have a process for regularly updating education sector plans and policies based on the latest climate risk assessments or teacher feedback?
 - Does the Ministry have a framework for consulting with teachers and climate experts before revising policies, to ensure that both climate risks and teacher needs are reflected in new plans?
 - Has the Ministry set up rapid-response protocols that allow schools and teachers to quickly adapt to sudden climate-related events (e.g., guidance on how to respond to school closures due to extreme weather)?
 - Can the Ministry develop a list of specific policy triggers (e.g., number of school closures due to weather, heat stress reports from teachers) that prompt immediate review of education policies?

4. How can the Ministry ensure equitable support for teachers, especially those in remote, under-resourced, or climate vulnerable regions?

- a. Checklist Items:
 - Has the Ministry identified which teachers and regions are most vulnerable to climate-related impacts (e.g., teachers in coastal areas prone to flooding or rural teachers with limited infrastructure)?
 - Has the Ministry mapped out specific interventions (e.g., infrastructure upgrades, housing support) for teachers in high-risk areas? Are there targeted budget allocations to ensure these teachers receive necessary resources?
 - Has the Ministry developed a list of priority regions and created a timeline for implementing targeted interventions (e.g., infrastructure upgrades, resource allocation) based on urgency and available funding?
 - Are there collaborations with international organizations or NGOs to secure additional funding or resources for teachers in high-risk areas?
- 5. What specific monitoring and evaluation tools or systems can the Ministry use to track the success of climate-related policies in supporting teachers?
 - a. Checklist Items:
 - Is there dedicated monitoring capacity within the Ministry for reviewing climate policy outcomes for teachers?
 - Are there specific metrics (e.g., number of school closures avoided, teacher absences due to climate events) that track the effectiveness of policies in supporting teachers?
 - Can the Ministry use teacher reports or school attendance data to track whether policies are helping reduce the impact of climate events on teachers?
- 6. What actions can the Ministry take to make sure that the role of teachers and schools in climate change adaptation is recognized in national climate policies?

- a. Checklist Items:
 - Has the Ministry taken action to ensure education is clearly included in National Adaptation Plans and other climate strategies?
 - Has the Ministry engaged in any formal dialogue with national or international climate bodies to advocate for education's role in climate change efforts?
 - Has the Ministry included specific language in climate strategies that outlines teachers' roles in building community resilience to climate change (e.g., teaching climate literacy, supporting local adaptation efforts)?
 - Are there joint initiatives with other sectors (e.g., health, environment) that position teachers as community leaders in climate resilience efforts?

7. What practical research partnerships or data collection efforts can the Ministry pursue to gather evidence on integrating climate resilience into education policies?

- a. Checklist Items:
 - Has the Ministry reviewed best practices from other countries that have successfully integrated climate resilience into their education systems, and can those be adapted locally?
 - Are there collaborations with research institutions to assess how well current education policies are supporting climate adaptation in schools, and how they can be improved based on evidence?

Dimension 3

Coordination

Introduction

Cross-sector coordination is essential for building a climate-resilient education system, with Ministries of Education at the center. Collaborating with government bodies, NGOs, and community organizations ensures that education priorities, particularly those related to teachers and schools, are embedded in broader climate resilience strategies. Such partnerships create a unified approach to addressing both immediate climate challenges and long-term adaptation needs.

Teachers are crucial to these discussions, as they experience firsthand the impact of climate change in schools. Their insights into how climate events affect students, infrastructure, and learning environments are invaluable. Ministries can tap into this knowledge through structured forums like advisory panels or focus groups, ensuring strategies are practical and grounded in real-world conditions.

To protect schools and teachers during climate events, Ministries must establish clear communication systems and emergency protocols. Real-time communication with emergency agencies and partnerships with NGOs for logistical and psychosocial support ensure swift responses, especially in high-risk areas where additional resources may be needed.

Investing in teacher capacity is equally important. Cross-sectoral training equips educators with the skills needed to manage climate challenges, empowering them to take proactive roles during crises. Such efforts not only strengthen the resilience of the education system but also position teachers as key contributors to broader climate responses.

The following reflective prompts and checklist items are designed to facilitate discussions within Ministries of Education on key efforts related to **Coordination**, such as:

- Ensuring teacher perspectives are included in climate resilience planning through unions, advisory panels, and focus groups.
- Developing real-time communication systems and joint emergency protocols with other agencies to protect teachers and students during climate events.
- Creating flexible, cross-sector training programs to build teacher capacity for managing climate-related impacts, and update them regularly.
- Partnering with NGOs to provide logistical and psychosocial support to teachers, particularly in high-risk regions.

- 1. How can the Ministry of Education ensure that inter-sectoral collaboration integrates the perspectives and expertise of teachers in climate resilience planning?
 - a. Checklist Items:
 - Has the Ministry identified a lead department or focal point responsible for overseeing collaboration with other sectors (e.g., environment, disaster management) to ensure teachers' needs are integrated into national climate resilience plans?
 - Has the Ministry identified funding mechanisms (e.g., national budget allocations, international grants) to support teacher training, NGO partnerships, and other climate resilience efforts across the education sector?
 - Has the Ministry taken steps to create or formalized partnerships with other sectors (e.g., environment, disaster management), ensuring that teachers' perspectives are represented in national climate strategies,

either through existing structures like teacher unions, councils, or direct teacher engagement?

- Are there clear, structured opportunities for teachers to contribute to cross-sectoral planning through existing mechanisms (e.g., unions, representatives, teacher focus groups)?
 - Are roles and responsibilities for teachers in multi-sectoral climate resilience teams clearly and formally defined and documented, ensuring that their contributions are valued and integrated into broader strategies?
 - Is there an ongoing feedback mechanism in place for teachers participating in multi-sectoral climate resilience teams, allowing their experiences and suggestions to be integrated into improving future participation?
- Is there a centralized system for identifying and reporting teachers' needs during climate-related events, and is this information consistently shared with other sectors and across the Ministry?

2. What are the key benefits and challenges of involving teachers in multi-sectoral climate resilience teams, and how can the Ministry address these?

- a. Checklist Items:
 - Has the Ministry identified the specific benefits of involving teachers in multi-sectoral teams, such as their ability to provide localized knowledge and real-time feedback during climate events?
 - Are there specific barriers preventing teachers from participating effectively (e.g., time constraints, resource limitations), and has the Ministry developed solutions in consultation with stakeholders (e.g., unions, NGOs) to mitigate these challenges?
 - Does the Ministry provide targeted professional development opportunities to equip teachers with the skills needed for climate resilience planning, and are these developed in consultation with teacher unions or other representative bodies?
 - Are teachers formally recognized for their contributions to multisectoral climate resilience efforts, through formal awards, acknowledgments, or professional recognition systems?
- 3. How can coordination between the education sector and emergency management agencies be improved to ensure rapid and efficient responses during climate-related disasters or events?
 - a. Checklist Items:
 - Has the Ministry collaborated with emergency management agencies to develop joint Standard Operating Procedures (SOPs) that include provisions for teacher safety, well-being, and stability during climate events?
 - Has the Ministry ensured that contact lists of key emergency personnel and rapid communication systems (e.g., mobile alerts, emergency hotlines) are regularly updated and accessible to schools and teachers during climate events?

• Does the Ministry organize regular drills and training exercises for school staff and teachers on how to respond to climate-related disasters, with a focus on protecting students and staff?

4. How can the Ministry leverage partnerships with NGOs and community organizations to support teachers during climate events?

- a. Checklist Items:
 - Has the Ministry consulted with local communities and civil society organizations to understand local climate impacts, particularly in marginalized or high-risk areas, and developed regional or local-level coordination plans with NGOs to address these varying risks?
 - Has the Ministry explored partnerships with NGOs or community organizations that can provide specific types of support (e.g., logistical, financial, psychosocial) to teachers during and after climate events?
 - Has the Ministry established mechanisms for immediate post-climate event support (e.g., psychosocial services, recovery time) to ensure that teachers can fully recover from the physical and mental strain of climate events?
 - Are there formal agreements (e.g., memorandums of understanding) with NGOs to ensure rapid support during climate emergencies, such as temporary shelters, staff relief, or psychosocial services?
 - Does the Ministry collaborate with NGOs and CSOs to monitor and evaluate the effectiveness of coordination efforts, ensuring equitable delivery of services to schools and teachers?
 - Has the Ministry partnered with international organizations to exchange best practices on supporting teachers during climate-related emergencies?

5. How can the Ministry support the development of cross-sectoral training programs that build teachers' capacity in climate resilience?

- a. Checklist Items:
 - Has the Ministry worked with other government bodies and teacher unions or representatives to develop comprehensive teacher training programs focused on climate resilience?
 - Are training programs accessible, scalable, and delivered through flexible methods (e.g., online, in-person) depending on available resources and local infrastructure?
 - Are there structured opportunities for teachers to provide feedback on cross-sectoral training programs to ensure they meet their specific needs in climate resilience?
 - Is there a regular review process to update training programs and ensure they reflect changing climate risks and teachers' evolving roles?
 - Are there mechanisms in place to assess how teachers apply their training in real-world classroom and school settings, and is this feedback used to refine training content?
- 6. How can the Ministry of Education strengthen intra-ministry coordination to ensure effective integration of climate resilience and support for teachers?

- a. Checklist Items:
 - Has the Ministry established regular communication mechanisms (e.g., monthly or quarterly meetings) to align departments on climate resilience strategies and ensure consistent coordination?
 - Does the Ministry have a centralized and comprehensive plan that integrates teacher-specific initiatives (e.g., crisis management, safe working environments)?
 - Is there a data-sharing system across departments on climate-related issues (e.g., teacher needs, infrastructure), and is it updated regularly to ensure accurate decision-making?
 - Are there regular internal evaluations to assess the effectiveness of intraministry coordination on climate resilience and teacher support, and are follow-up actions taken based on these evaluations?

Dimension 4

Finance

Introduction

Allocating financial resources effectively is critical to building climate resilience within education systems. Climate-induced disruptions, such as floods, heatwaves, and storms, often lead to financial instability for teachers. Challenges like delayed salaries, resource shortages, and insecure employment can weaken both the quality of education and the ability of teachers to contribute to climate adaptation efforts. Addressing financial vulnerabilities is essential for ensuring educational continuity and safeguarding teacher well-being.

Strategic financial planning is essential for safeguarding the education system while supporting teachers, particularly in climate-vulnerable regions. Ministries of Education can enhance resilience by aligning domestic budgets with teacher needs, while also exploring opportunities for international climate finance. Access to such funds can provide essential support for schools and educators, helping to maintain financial security during climate disruptions.

Comprehensive and equitable financial mechanisms play a vital role in addressing the unique challenges faced by teachers in affected areas. Salary continuity during school closures, emergency funds, parametric insurance schemes, and investments in professional development tailored to climate education can strengthen the education sector's ability to respond to climate risks.

The following reflective prompts and checklist items are designed to facilitate discussions within Ministries of Education on key efforts related to **Finance**, such as:

- Identifying common climate risks affecting schools and teachers, and developing flexible resource allocation plans to address specific challenges.
- Establishing emergency funds or contingency plans to ensure teacher salaries, school repairs, and educational continuity during climate disruptions.
- Exploring financial tools like insurance schemes and climate finance opportunities to secure resources for climate-vulnerable schools and teachers.
- Strengthening financial coordination through tracking fund allocation, gathering teacher feedback, and conducting regular reviews to ensure funds are used effectively.

- 1. How can the Ministry budget and allocate funds to ensure that the education system remains resilient during and after climate-related disruptions?
 - a. Checklist Items:
 - Has the Ministry identified the most common climate risks impacting schools and teachers (e.g., floods, heatwaves) and developed a resource allocation plan to address these specific challenges? If no climate risk assessment has been done, can the Ministry work with local stakeholders and teacher representatives to gather data and identify key vulnerabilities?
 - Is there an emergency fund, or can smaller-scale contingency plans be created to ensure teacher salaries, school repairs, and continuity during climate disruptions? If not, can the Ministry explore options for establishing such systems or identify external funding sources?
 - Does the Ministry have methods for reallocating education resources during climate emergencies, ensuring that urgent needs like teacher salaries, school repairs, and mental health support are prioritized?
 - Can these mechanisms be adapted to respond flexibly to both national and regional climate events?
 - Are teachers or their representatives involved in the decisionmaking stages to ensure their needs are integrated?
 - Is the Ministry coordinating with other government agencies (e.g., Ministry of Finance, Environment) and international donors to align education funding with broader national climate resilience strategies? Are teachers or their representatives included at appropriate stages of planning to ensure educational concerns are integrated?
 - Are teacher professional development programs on climate resilience and disaster response included in financial planning? If no dedicated funds exist, can partnerships with teacher representatives, NGOs, or external organizations help provide low-cost or externally funded training programs?
 - Has the Ministry developed a short- to mid-term financial strategy to account for climate-related risks, with flexibility to scale based on available resources? Does this strategy include clear provisions for ensuring teacher safety and well-being?

- 2. What role can financial instruments like climate bonds, insurance schemes, or other innovative tools play in protecting schools and teachers during climate-related events?
 - b. Checklist Items:
 - Has the Ministry explored financial tools, like parametric insurance or micro-insurance, to protect schools and teachers from immediate climate risks? If complex instruments like climate bonds are unfamiliar or not feasible, can smaller-scale options such as emergency funds be piloted to manage immediate risks?
 - Can the Ministry review simpler case studies or examples from comparable regions to assess the potential for using insurance schemes or similar tools?
 - Has the Ministry engaged key stakeholders, including teacher representatives and local authorities, to understand the feasibility and risks of adopting financial protection tools? Has input been gathered on the perceived benefits and drawbacks of such tools?
 - Is there a simple framework in place to evaluate the costs and benefits of financial tools (e.g., comparing costs of insurance schemes vs. potential climate-related losses)? Can this framework be developed in collaboration with key stakeholders, including teachers, to address their specific concerns?

3. What funding mechanisms can the Ministry establish to secure climate finance and ensure teachers receive support (e.g., salaries, resources) in climate-vulnerable regions?

- a. Checklist Items:
 - Has the Ministry applied for or explored climate finance opportunities (e.g., Green Climate Fund) or local sources of funding to support schools and teachers in vulnerable regions? Are there smaller regional funding opportunities that could be used as entry points for more immediate support?
 - Has the Ministry worked with teacher unions to ensure that the application process includes teacher-focused concerns?
 - Are there simplified processes in place to disburse emergency funds to maintain teacher salaries, school operations, and teacher well-being during climate disruptions? If existing processes are inefficient, can temporary manual systems be explored to ensure timely disbursements?
 - Has the Ministry established clear, equitable criteria to prioritize funding for the schools and teachers most vulnerable to climate impacts? Can this be done in collaboration with teachers or their representatives?
 - Does the Ministry have a basic system in place for tracking funding applications and ensuring teacher-specific needs are reflected in future strategies? If no system exists, can simple tools like spreadsheets be implemented to begin monitoring?
- 4. What role can private sector partnerships play in financing climate resilience in education, including supporting teachers and schools?

- a. Checklist Items:
 - Has the Ministry engaged private sector partners to explore opportunities for co-financing climate resilience initiatives that benefit teachers and schools (e.g., infrastructure, professional development)?
 - Can private companies provide in-kind support (e.g., construction materials, technology) to aid in building school and teacher resilience?
 - Has the Ministry explored leveraging smaller-scale Corporate Social Responsibility (CSR) programs or local philanthropic organizations to attract investment in teacher well-being and school safety?
 - Are there private foundations or philanthropic organizations the Ministry can approach for grants or targeted funding to support teacher-focused climate resilience programs?
- 5. How can financial coordination within the Ministry be strengthened to ensure climate resilience efforts effectively support teachers?
 - a. Checklist Items:
 - Has the Ministry designated a cross-departmental team or focal point responsible for coordinating climate-related funding and ensuring teacher needs are prioritized?
 - If climate funding exists, does the Ministry have a tracking system to monitor how funds are allocated to support teacher well-being, professional development, and safety?
 - Are there structured feedback mechanisms in place to allow teachers to regularly share their views on climate-related financial decisions, particularly during budget planning and review phases?
 - Does the Ministry conduct regular reviews or audits of how climaterelated funds are being used to support teachers, ensuring that gaps or inefficiencies are addressed? Can teacher feedback or external audits help identify and address gaps more effectively?

Dimension 5

Infrastructure

Introduction

Building climate-resilient school infrastructure is essential for safeguarding teachers and ensuring continuity of education in regions vulnerable to extreme weather. Schools must offer a stable environment where both teachers and students can feel secure, especially during climate-related disruptions. Ministries of Education are central to retrofitting current infrastructure and designing future projects that are responsive to evolving climate risks.

Teachers are directly impacted by inadequate infrastructure, from poor shelter during extreme weather to substandard ventilation that hinders their ability to teach effectively. Their insights are crucial for identifying weaknesses in school facilities that may not be immediately evident to

policymakers. Engaging teachers in the infrastructure planning process ensures that solutions are grounded in the practical realities of the classroom and tailored to local needs.

In resource-constrained settings, Ministries can still implement practical, cost-effective retrofitting measures, such as reinforcing roofs or using locally available materials. Collaborating with local communities, NGOs, and donors can help secure the funding and technical assistance needed to support these efforts. When large-scale solutions are not immediately possible, interim measures like portable classrooms or temporary shelters can help protect teachers and students.

Infrastructure planning should also align with broader national strategies, such as Education Sector Plans and climate resilience goals, to maximize the impact of investments. Additionally, establishing systems for regular maintenance and monitoring ensures that safety improvements continue to serve teachers and students in the long term.

The following reflective prompts and checklist items are designed to facilitate discussions within Ministries of Education on key efforts related to **Infrastructure**, such as:

- Conducting thorough assessments to identify vulnerabilities in school infrastructure and prioritize retrofitting projects that focus on teacher safety.
- Partnering with local stakeholders and international organizations to secure funding and technical support for retrofitting schools in climate-vulnerable regions.
- Incorporating teacher feedback into infrastructure planning to ensure that classrooms and other facilities meet their needs during and after climate events.
- Creating safe zones and rest areas for teachers, prioritizing physical and mental well-being in infrastructure upgrades.
- Ensuring retrofitting efforts are aligned with national education strategies and climate resilience goals.

- 1. What cost-effective strategies can be used to retrofit schools, ensuring both immediate teacher safety and long-term resilience, especially in climate-vulnerable regions?
 - a. Checklist Items:
 - Can or has the Ministry conducted an assessment of existing school infrastructure to identify climate vulnerabilities and prioritize retrofitting projects based on risk?
 - If capacity for a formal assessment is limited, can the Ministry partner with external agencies, local authorities, or community organizations for joint vulnerability assessments?
 - Is the Ministry using available local or regional climate data to guide retrofitting decisions and ensure resilience?
 - If no local climate data are available, can regional or global climate data be adapted for local planning, and can teachers and

communities contribute observational data to support decisionmaking?

- Has the Ministry identified practical, low-cost retrofitting measures that can be quickly implemented to protect teachers and classrooms?
- Has the Ministry sought external partnerships to fund urgent retrofitting projects in climate-vulnerable schools?
- Where formal budgets do not exist, can retrofitting solutions be incorporated into maintenance plans or funded through partnerships with local businesses, NGOs, or community-led initiatives (e.g., volunteer-driven repairs)?
- Can the Ministry develop a phased retrofitting plan, prioritizing the most vulnerable schools and focusing on teacher safety?
 - If a phased plan is not yet in place, can the Ministry implement interim measures (e.g., temporary structures, waterproof tents, portable classrooms) while waiting for more permanent solutions?
- Are retrofitting efforts aligned with broader national education strategies or plans (e.g., Education Sector Plans) and national development goals, including those around climate resilience?
- Is there a formal or informal system for gathering teacher feedback on infrastructure needs, retrofitting, and post-disaster repair projects?
- Can the Ministry establish a monitoring and maintenance schedule, or work with local partners to ensure retrofitted buildings remain safe over time?
- 2. What specific retrofitting measures can the Ministry implement to protect teachers from extreme weather, while addressing both their physical safety and emotional well-being?
 - a. Checklist Items:
 - Can retrofitting efforts be integrated with broader disaster risk reduction strategies, including mental health considerations for teachers, as resources allow?
 - Has the Ministry consulted global best practices in climate-resilient school infrastructure to inform retrofitting strategies?
 - Do retrofitting projects include dedicated safe zones (e.g., shelters, rest areas) that protect teachers' physical safety and mental well-being during extreme weather?
 - If dedicated safe zones are not feasible, can existing spaces be adapted to serve as temporary safe areas (e.g., "safe spots" in classrooms) for teachers?
 - Where feasible, can the Ministry enhance classroom conditions to improve teacher comfort and reduce physical strain?
 - Has the Ministry consulted teachers (either formally or informally) to identify specific infrastructure issues (e.g., poor ventilation, roof leaks) that directly affect their safety and ability to teach?
 - In resource-constrained settings, can informal consultations through teacher representatives or local community leaders be leveraged?
 - Has the Ministry provided simple guides or training to teachers on using and maintaining retrofitted infrastructure during and after climate events, ensuring their safety and comfort?

- If formal training is not feasible, can peer-led or community-based training be provided, and can resources such as posters or visual aids be used instead of detailed manuals?
- Can or does the Ministry collaborate with local stakeholders (e.g., school management committees, community leaders) to identify opportunities for small-scale retrofitting projects, especially those that use local materials, that improve classroom and teacher safety?
- Are there guidelines ensuring teachers are not responsible for postdisaster repairs, allowing them to focus on teaching and supporting students?
- Has the Ministry considered temporary or alternative teaching spaces (e.g., mobile classrooms, local halls) to ensure teaching continues during long-term infrastructure repairs?
- Has the Ministry ensured that retrofitting efforts are aligned with emergency response plans to protect teacher safety during ongoing or sudden climate-related events?

3. How can infrastructure planning integrate teacher-specific requirements, such as safety, comfort, and accessibility, into climate-resilient upgrades?

- a. Checklist Items:
 - Are teacher representatives consulted in **key infrastructure planning** discussions to ensure their needs are adequately considered (e.g., classroom ventilation, secure workspaces)?
 - Where formalized consultation is not feasible, can climate resilience in infrastructure be improved using participatory processes, involving teachers and local communities to identify needs and co-create solutions?
 - Can infrastructure planning explicitly integrate teacher-specific needs, such as proximity to safe housing and access to essential services, into climate-resilient upgrades?
 - Can the Ministry incorporate practical, locally feasible accessibility improvements (e.g., ramps, accessible pathways) into infrastructure planning for teachers with disabilities?
 - Are safe and functional water and sanitation facilities included in climateresilient infrastructure plans to meet teacher needs during and after extreme weather events?

4. What factors should guide the Ministry in prioritizing infrastructure upgrades to protect teachers, including climate risk, accessibility, and teacher well-being?

- a. Checklist Items:
 - Can the Ministry use or develop a teacher-centered vulnerability index that combines climate risk data with teacher-specific needs (e.g., access to safe housing, proximity to essential services) to guide infrastructure upgrades?
 - When formal indices are not available or feasible, can local observations or informal data collection methods be used to assess climate risks?
 - Does the Ministry collaborate with teacher representatives to ensure infrastructure upgrades account for both professional and personal risks faced by teachers during climate events?

- Has the Ministry explored partnerships, insurance schemes, or financial protections to cover personal losses teachers may incur (e.g., damage to homes, teaching materials) during climate events?
 - If formal insurance schemes are inaccessible, can communitybased initiatives or micro-loan schemes help provide financial protection?
- 5. What mechanisms can the Ministry implement to ensure teachers have continuous access to essential teaching materials and resources during school closures caused by climate disruptions?
 - **a.** Checklist Items:
 - Has the Ministry established a system to distribute essential teaching materials (e.g., textbooks, digital resources) to teachers in remote or disaster-prone areas in advance of climate disruptions?
 - If digital solutions are not feasible, can physical alternatives (e.g., printed handouts) be prepared and distributed in advance of disruptions?
 - Where feasible, can the Ministry provide digital or physical resources (e.g., solar chargers, printed materials) to support teachers during disruptions?
 - Are teaching resources stored in climate-safe locations (e.g., cloud backups, waterproof containers) to prevent loss during disasters?
 - Can the Ministry provide emergency teaching kits that include essential resources (e.g., printed lessons, small chalkboards) to ensure teachers can continue working effectively and safely during disruptions?
- 6. How can infrastructure improvements be designed to ease both the physical and mental strain on teachers, supporting their recovery and capacity to teach after climate disruptions?
 - a. Checklist Items:
 - Are teacher rest areas and safe zones prioritized in infrastructure upgrades to ensure teachers have dedicated spaces for mental and physical recovery during and after climate events?
 - Is there a specific plan for involving teacher representatives in postdisaster recovery phases to address mental health concerns and workrelated stress?
 - Has the Ministry implemented health and safety protocols for teachers during recovery phases, with clear guidelines on safe school re-entry and protective measures?

Dimension 6

Teaching and Learning

Introduction

Teachers are essential to maintaining educational continuity during climate-related disruptions. They face immediate challenges such as school closures and the emotional toll of climate-induced stress. Ministries of Education can support teachers by providing the tools, resources, and flexibility needed to navigate these challenges.

Teachers require adaptable resources, from low-tech solutions like radio lessons to digital tools that can be deployed in diverse conditions. Ministries can prepare by partnering with local providers to distribute materials efficiently and prioritize communities most affected by disruptions. Flexible learning environments, such as community halls or mobile classrooms, further ensure that education continues in varied circumstances.

Curriculum design should involve teachers to ensure climate-related content is practical and relevant. Engaging teachers in development ensures that content reflects classroom realities, while flexible lesson modules help tailor instruction without adding pressure. Incorporating local knowledge systems makes curricula more adaptable and responsive to broader educational goals.

Supporting teacher well-being is critical to resilience. Climate disruptions can lead to stress and burnout, so Ministries should offer professional development in social-emotional learning, peer support networks, and improved physical working conditions like ventilation and cooling systems. Strengthening teacher well-being enables them to better support students during crises.

The following reflective prompts and checklist items are designed to facilitate discussions within Ministries of Education on key efforts related to **Teaching and Learning**, such as:

- Identifying tools and resources that enable teachers to sustain educational continuity during climate disruptions, offering both low-tech and digital options tailored to varying levels of infrastructure and accessibility.
- Involving teachers in curriculum development to ensure that climate-related content is adaptable, locally relevant, and aligned with the challenges they face in their teaching environments.
- Fostering teacher well-being by offering emotional support mechanisms, peer collaboration opportunities, and improving working conditions that can mitigate the stresses caused by extreme climate conditions.

- 1. How can teaching and learning continue effectively during and after climaterelated disruptions?
 - a. Checklist Items:

- Has the Ministry developed adaptable lesson plans and resources that can be quickly used during climate-related disruptions, such as printed handouts, SMS-based lessons, or digital tools (tablets, mobile apps, online platforms)?
- Are low-tech solutions (e.g., radio broadcasts, printed worksheets, SMS learning systems) available and ready to be deployed when internet or electricity is limited?
 - Have partnerships been established with local radio stations or telecom providers for quick deployment?
- Are teachers provided with flexible learning environments, such as community halls, pop-up tents, or mobile classrooms, to adapt quickly when schools are inaccessible?
 - Is there a system for procuring and distributing these spaces as needed, either independently or through partnerships?
- Does the Ministry have a stock of emergency teaching resources (e.g., solarpowered devices, chalkboards) and a plan for rapid distribution during crisis situations?
- Does the Ministry have a clear process for identifying and prioritizing marginalized communities and low-resource schools in the distribution of climate-related teaching resources and training?
 - Can this process be adapted based on real-time assessments of need during disruptions?
- Is there a plan to address both teachers' and students' post-disaster needs, including replacing lost materials and providing emotional support?
 - Does this plan include roles for local mental health services and a basic timeline for material distribution?

2. How can the Ministry integrate climate resilience into a practical and responsive curriculum without overburdening teachers?

- a. Checklist Items:
 - Are teachers, teacher representatives, or unions consulted on curriculum updates, particularly on climate-related content? Is there a structured process for gathering teacher input through formal feedback channels or informal community meetings?
 - Has the Ministry integrated local knowledge systems and environmental case studies into the curriculum to enhance engagement and local adaptation strategies?
 - Does the curriculum offer flexible modules that teachers can adapt to local conditions, such as hands-on community projects for resource-limited schools or digital simulations for schools with more technology? Are these modules designed to be easy to implement?

- Are teaching materials regularly updated, including local climate data and real-world impacts, to keep lessons relevant?
- Is the curriculum designed to allow gradual integration of climate topics, ensuring it complements existing subjects without overwhelming teachers or students?
- Has the Ministry evaluated whether climate-related teaching materials are accessible to all students, including those with disabilities? Are there suggested adaptations to allow for differentiation?
- 3. How can the Ministry ensure teachers have access to the training and resources needed to deliver effective education in changing environmental conditions?
 - a. Checklist Items:
 - Are professional development programs on climate-related education offered through in-person workshops, mobile training units, or online courses, depending on available resources? Are there low-cost training options through local experts or teacher peer networks?
 - Does the Ministry support teacher knowledge-sharing platforms (e.g., peer networks, local group meetings, or online forums) where teachers can exchange strategies for teaching in climate-impacted environments? Are these platforms designed to be informal if necessary?
 - Do teachers have access to sustainable classroom resources, such as solar-powered lights, cooling aids, or printed teaching materials? Does the Ministry have long-term agreements with local suppliers or partners to ensure consistent supply and maintenance of these resources?
 - Is there guidance for teachers on the sustainable use and maintenance of retrofitted or low-tech resources, such as storm-proofing classrooms and maintaining solar-powered devices?
 - Does the Ministry offer follow-up support or refresher workshops to ensure long-term functionality of these resources?
- 4. How can teacher and student well-being be protected during and after climate-related disruptions?
 - a. Checklist Items:
 - Are teachers regularly trained to recognize signs of stress and trauma in students, with basic guidelines on how to offer support and refer students to local mental health services? Is there a referral system with community health services in place?
 - Are there professional development programs or workshops that offer teachers strategies to manage their own stress and trauma, in addition to supporting their students during and after climate-related disruptions?

- Does the Ministry provide simple, pre-prepared social-emotional learning (SEL) resources to help teachers and students manage the psychological impacts of climate-related disruptions?
- Are physical working conditions (e.g., classroom ventilation, access to cooling aids) regularly checked and improved, especially in regions prone to heat waves or other extreme conditions? Does the Ministry work with local suppliers to secure cooling or ventilation aids when necessary?
- Does the Ministry have a system in place for tracking teacher burnout or fatigue, with support mechanisms that include reduced workloads, access to mental health services, and flexible schedules during prolonged disruptions? Can teachers access professional counseling services or peer-support networks when needed?

5. How can assessments measure the development of climate resilience in both students and teachers?

- a. Checklist Items:
 - Are student assessments designed to measure practical climate resilience skills, such as the ability to complete community-based projects or demonstrate real-world problem-solving? Are there simple rubrics or tools for teachers to assess resilience skills?
 - Are teachers trained to assess students' problem-solving abilities, using local climate case studies or community adaptation projects? Are the training materials available in accessible formats (e.g., printed handouts, local workshops)?
 - Has the Ministry established a system to track and evaluate the long-term effectiveness of climate education in building resilience in both students and teachers?
 - Are there regular feedback loops with teachers that allow for continuous adaptation of curricula and teaching methods to respond to emerging climate challenges?

Dimension 7

Schools and Communities

Introduction

Schools play a central role in building community resilience to climate change, functioning as both learning hubs and key points of engagement within communities. Teachers are vital in connecting schools to communities, but their involvement must be carefully

managed to prevent overloading their existing responsibilities. Ministries of Education can foster these connections by encouraging partnerships that draw on community expertise and resources, enabling teachers to lead climate resilience efforts without becoming overwhelmed.

Collaborative community engagement is essential to effective climate resilience strategies. Ministries can facilitate partnerships between schools and local leaders, parents, and volunteers, ensuring that climate action initiatives are shared efforts. By utilizing public or informal community spaces, rather than relying solely on school resources, Ministries can further ease the pressure on teachers and staff.

Providing practical, low-cost tools and clear guidelines allows teachers to take on a facilitator role rather than managing all aspects of climate projects. Ministries can empower teachers and students by offering ready-to-use resources for community-led projects and disaster preparedness, reducing the time and energy teachers need to invest in these activities.

Supporting student-led climate leadership is another key strategy. Empowering students to lead climate initiatives—while teachers provide mentorship—helps reduce teacher involvement and gives students hands-on experience in resilience building.

Teacher unions and community groups have a critical role to play in advocating for the integration of climate resilience into education policies. Ministries can engage these stakeholders to ensure that climate resilience responsibilities are well-supported and that teachers have the tools they need without being overburdened.

The following reflective prompts and checklist items are designed to facilitate discussions within Ministries of Education on key efforts related to **Schools and Coordination**, such as:

- Ensuring that school-community climate resilience efforts do not increase teacher workload but are supported by clear guidelines and shared responsibilities.
- Leveraging local resources and expertise so that teachers act as facilitators in climate resilience, without being solely responsible for managing activities.
- Supporting student-led climate initiatives, with teachers acting as mentors rather than primary organizers.
- Engaging teacher unions and community groups to ensure that climate resilience responsibilities are well-supported and do not place additional stress on teachers.

- 1. How can teachers be supported to lead school-community engagement for climate resilience without increasing their workload?
 - a. Checklist Items:
 - Has the Ministry developed and distributed simple, adaptable guidelines that schools can use to engage communities in climate resilience, ensuring they are flexible to local conditions and supported by training or easy-to-access tools, without creating extra burdens for teachers?
 - Has the Ministry assessed the availability of PTAs, school committees, or volunteer networks in schools?
 - If these structures are lacking, can the Ministry collaborate with local NGOs or community groups to provide initial support or training?
 - Is the Ministry identifying and actively working to formalize partnerships with existing community networks (e.g., local councils, religious groups, NGOs) to share responsibility for climate resilience efforts, ensuring clear roles so teachers are not solely responsible?
 - Are schools encouraged and supported to use public spaces (e.g., community centers, libraries, outdoor venues) for climate resilience activities, with clear guidelines for securing these spaces?
 - If formal spaces are unavailable, are informal spaces (e.g., marketplaces, open-air areas) made accessible for climate resilience activities, reducing the burden on teachers?
- 2. How can teachers collaborate with local communities to develop low-cost, flexible climate resilience strategies?
 - a. Checklist Items:
 - Has the Ministry encouraged schools to invite local elders, farmers, or community members to share their knowledge of local environmental challenges?
 - If these individuals are unavailable, has the Ministry provided alternative ways (e.g., printed resources or simple lesson plans) to ensure local knowledge is still shared?
 - Has the Ministry provided adaptable, easy-to-use templates for organizing community-led climate initiatives (e.g., tree planting, risk mapping), ensuring teachers can act only as facilitators, with minimal administrative burden?
- 3. How can the Ministry ensure that teachers are equipped to contribute to disaster management and school safety plans
 - a. Checklist Items:

- Does the Ministry provide a clear, step-by-step disaster preparedness checklist adapted to local school contexts and capacity, reducing the need for additional planning or research by teachers?
- Are there school-community partnerships, involving local disaster response teams or community members, that share the responsibility for creating and maintaining school disaster plans, with a monitoring system to ensure effective collaboration and reduced burden on teachers?
- Are there school-community partnerships involving local disaster response teams or community members, with a monitoring system in place to ensure the plan is regularly updated and teachers' responsibilities remain limited?

4. How can teachers guide student climate leadership and advocacy without taking on excessive responsibility for extracurricular projects?

- a. Checklist Items:
 - Are there student-led clubs or informal groups where teachers act as mentors rather than organizers, or can the Ministry support schools in creating and maintaining these groups to reduce teacher responsibility?
 - Does the Ministry provide easy-to-use resource kits or project templates, or adapt existing materials from partners, that empower students to initiate and lead their own climate initiatives, reducing the need for teachers to organize activities?
 - Are teachers recognized (e.g., through school-based awards, letters of acknowledgment) for mentoring student-led climate projects, with recognition systems that are meaningful and feasible across school contexts?

5. How can teacher unions and collective action contribute to building schoolcommunity climate resilience?

- a. Checklist Items:
 - Does the Ministry facilitate regular coordination between teacher unions, community groups, and school leadership to ensure shared responsibilities for climate resilience initiatives, with support for both formal and informal communication channels?
 - Are teacher unions advocating for the integration of climate resilience into national and local education policies, and is the Ministry providing necessary support and resources to ensure their advocacy is effective?
 - Are teacher unions involved in formal policy development processes, with clear channels for participation, to ensure that climate resilience projects are realistically integrated into teachers' regular duties without adding undue stress or workload?

Appendix A: Key Action Points for Ministerial Staff

Dimension 1: Data and Evidence Key Action Points for Ministerial Staff	
Focus on collecting essential climate-related data and using it to inform national education policies, teacher deployment, and resource distribution, particularly in vulnerable areas.	Formalize partnerships with local, national, and international organizations to improve climate data collection and develop comprehensive teacher support mechanisms. Leverage external expertise to strengthen internal capacity.
Use climate data and demographic information to identify vulnerable teacher populations, whether based on geography or socio- economic factors. Allocate resources and adjust policies strategically to ensure these teachers receive targeted support.	Implement systems to continuously review and update education policies based on emerging climate data and teacher feedback. Ensure national education strategies remain adaptive to evolving climate risks.

Dimension 2: Policy and Planning	
Key Action Points for Ministerial Staff	

Ensure that teacher well-being and climate resilience are integrated into national and subnational education policies, with specific attention to supporting teachers in high-risk climate zones. Review existing policies and sector plans to ensure they address both climate adaptation and the safety and professional needs of teachers.	Establish formal and informal mechanisms (e.g., teacher forums, feedback platforms, consultations) to engage teachers and teacher unions in the development and review of climate-responsive education policies. Ensure that teacher experiences and insights directly inform policy changes.
Create flexible education sector plans that can	Identify and offer targeted support for teachers
be updated regularly based on emerging	in vulnerable regions, particularly in rural,
climate data and teacher feedback. Implement	under-resourced, or climate-sensitive areas.
rapid-response protocols to address	Allocate resources and interventions (e.g.,
immediate climate impacts, and build in	infrastructure improvements, psychosocial
regular review cycles to keep policies relevant	support) based on vulnerability assessments,
over time.	ensuring equity in resource distribution.
Ensure that education's contribution to climate	Collaborate with local universities, research
change adaptation is recognized in national	institutions, and NGOs to gather evidence on
climate policies (e.g., Nationally Determined	integrating climate resilience into education
Contributions, National Adaptation Plans).	policies. Use data from local and international
Advocate for the inclusion of teachers and	best practices to inform climate-smart policy
schools as key agents of community resilience	decisions, particularly for low-resource or

in national and international climate discussions.

vulnerable regions.

Dimension 3: Coordination Key Action Points for Ministerial Staff	
Ensure that teachers' perspectives are	Formalize partnerships with government
systematically incorporated into national	sectors (e.g., environment, disaster
climate strategies through formal mechanisms	management) and NGOs to align climate
such as unions and task forces. Recognize and	resilience efforts with education. Focus on
promote teachers' contributions to climate	creating region-specific plans that address
resilience planning, encouraging their	localized climate risks, particularly in
continued engagement.	marginalized or high-risk areas.
Build robust systems for real-time communication and data-sharing across departments and with external partners. These systems should identify and address teacher needs during climate events, ensuring rapid responses and frequent updates.	Invest in cross-sectoral training programs that enhance teachers' capacity in climate resilience. Ensure flexibility in delivery methods (e.g., online, in-person) and regularly update training content to reflect changing climate risks. Continuously gather feedback from teachers to keep the training relevant.
Establish mechanisms to support teachers'	Regularly monitor and evaluate the
recovery after climate events, including	effectiveness of climate resilience strategies
psychosocial support and recovery time.	using clear indicators. Conduct internal
Leverage partnerships with NGOs and	reviews to ensure that strategies evolve and
community organizations to provide ongoing	improve over time, adapting to changing needs
support for physical and mental well-being.	and circumstances.

Key Action Points for Ministerial Staff	
Work with local stakeholders and teacher representatives to identify key vulnerabilities in schools and teacher populations. Use this data to guide resource allocation for infrastructure improvements and teacher support.	Create or strengthen emergency funds and processes to ensure continuity of teacher salaries, school repairs, and student support during climate disruptions. Ensure that educational continuity is a priority during these periods.
Coordinate education funding with broader national climate resilience strategies by	Include professional development on climate resilience and disaster response in financial

engaging with relevant government agencies, donors, and teacher unions. Ensure that both educational and teacher-specific priorities are integrated into high-level policy discussions.	planning. Where internal resources are limited, collaborate with external organizations or NGOs to fund and deliver teacher training.
Pilot financial instruments (e.g., insurance)	Implement systems to track fund allocation
that protect schools and teachers from climate	and gather feedback from teachers and school
impacts. Conduct a cost-benefit analysis to	leaders. Keep financial planning adaptive by
evaluate their effectiveness for the education	exploring partnerships with the private sector
sector.	to enhance resilience and support.

Key Action Points for Ministerial Staff	
Ministries should partner with external agencies, NGOs, and local authorities to support retrofitting, assessments, and maintenance where capacity is limited. Collaborative efforts can maximize resource mobilization and improve the impact of interventions.	Prioritize the identification and implementation of practical, low-cost retrofitting solutions (e.g., stormproof windows, locally sourced materials) to protect teachers and students. In resource-constrained environments, creative solutions such as volunteer-driven repairs and community-sourced materials can enhance resilience.
Retrofitting efforts should align with existing Education Sector Plans (ESPs), disaster risk reduction strategies, and climate resilience goals. This ensures that interventions are strategic and contribute to long-term educational and national development objectives.	Establish formal or informal channels for ongoing teacher input on infrastructure needs, retrofitting priorities, and post-disaster recovery. Incorporating teacher perspectives helps address their specific safety and well- being needs throughout the process.
Incorporate local and regional climate data into infrastructure planning to ensure context- specific resilience measures. Where formal data is unavailable, Ministries can gather community and teacher-generated observational data to inform decision-making.	Infrastructure planning should include dedicated teacher rest areas and safe zones, particularly in post-disaster recovery. Ministries should also develop clear health and safety protocols and ensure qualified professionals, rather than teachers, handle repair efforts to minimize teacher workloads.

Dimension 5: Infrastructure

Dimension 6: Teaching and Learning Key Action Points for Ministerial Staff

Develop adaptable lesson plans and ensure access to low-tech solutions (e.g., radio, SMS) and emergency teaching resources (e.g., solar- powered devices) to support teachers and students in maintaining education during climate-related disruptions. Prioritize marginalized communities in resource distribution and address both material and emotional post-disaster needs.	Engage teachers in the curriculum development process, ensuring that local knowledge systems and climate adaptation strategies are incorporated. Provide flexible modules that can be easily adapted by teachers to suit their local context, while ensuring gradual integration of climate topics to avoid overwhelming educators.
Ensure teachers have access to continuous training on climate-related education, through online courses, mobile workshops, or teacher peer networks. Equip them with practical classroom resources (e.g., solar-powered lights, cooling aids) and provide clear guidance on using low-tech resources effectively.	Establish mechanisms for recognizing and addressing stress and trauma among students and teachers, including access to mental health services and social-emotional learning (SEL) resources. Monitor teacher workloads and well-being, offering support mechanisms such as flexible schedules and peer-support systems during prolonged disruptions.

Incorporate practical assessments that measure climate resilience skills, such as problemsolving and community-based projects. Provide teachers with the tools and training needed to assess these skills, and create feedback loops to adjust curricula based on emerging climate challenges.

Dimension 7: Schools and Communities Key Action Points for Ministerial Staff	
Develop clear, adaptable guidelines for schools to engage communities in climate resilience initiatives, ensuring these efforts are supported by local structures like PTAs, volunteer networks, and existing community organizations. Minimize the additional workload for teachers by sharing responsibilities with community members.	Facilitate partnerships between schools, local leaders, and NGOs to leverage community expertise and resources for climate resilience projects. Ensure these partnerships enable schools to implement low-cost, flexible strategies that reduce the burden on teachers while strengthening community engagement.
Provide easy-to-use templates and resources for student-led and community-led climate initiatives, enabling teachers to act as facilitators rather than primary organizers. Encourage community ownership of climate activities by utilizing public spaces and informal venues.	Collaborate with teacher unions and community groups to advocate for climate resilience integration in school policies. Ensure responsibilities are distributed equitably across stakeholders, reducing the pressure on individual teachers and ensuring system-wide support for climate initiatives.