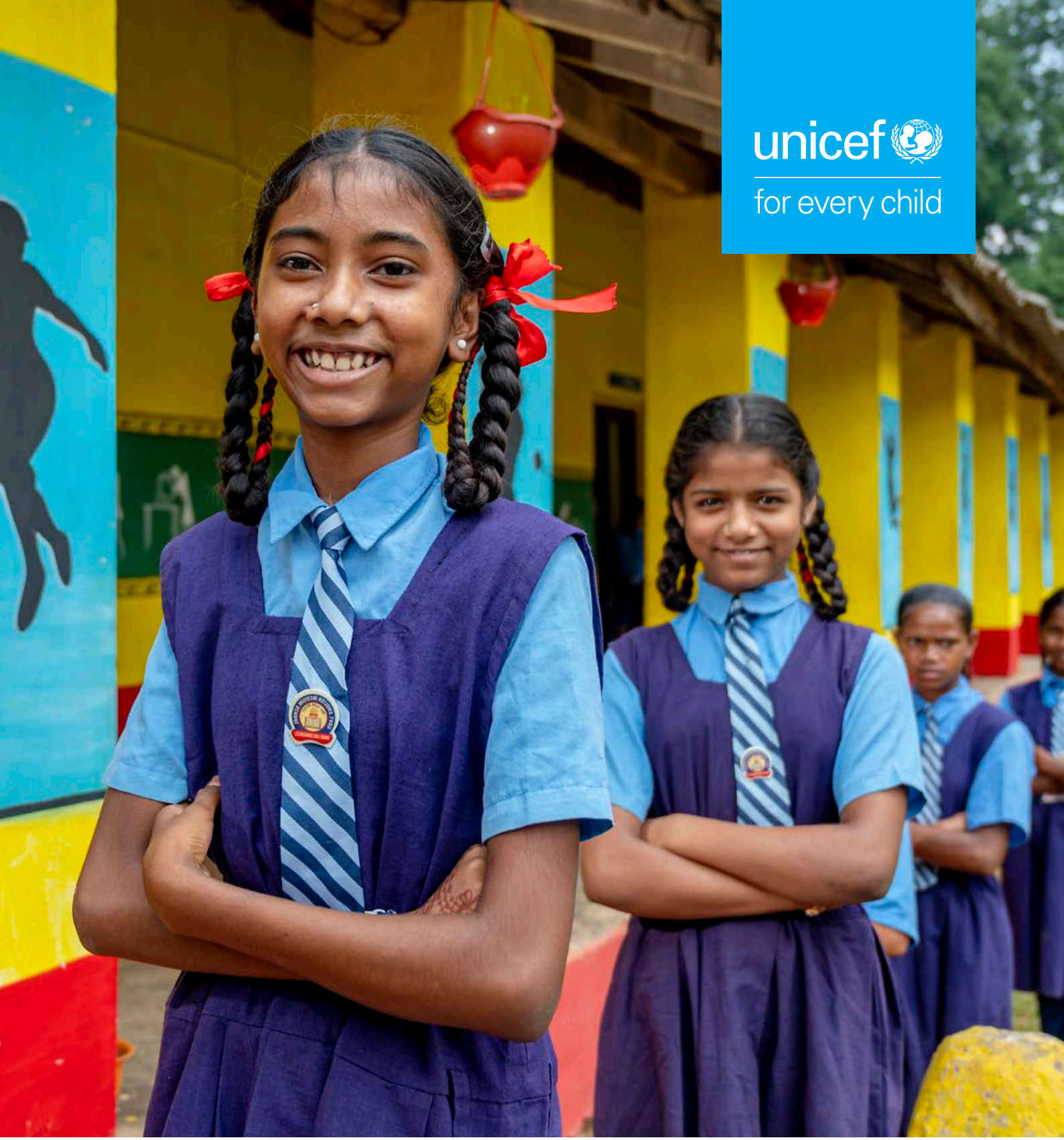

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TOWARDS CLIMATE RESILIENT EDUCATION SYSTEMS

A Tool for Reflection, Dialogue and Progress Assessment for Ministries of Education and its Partners

Cover: Kids with help of Alexa. Alexas were installed by the school staff with help of Amazon and also donations and their own salaries. Location Primary & Middle School, Dharur, Chatisgarh.

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Suggested citation: Kagawa, F. (2022). *Towards Climate Resilient Education Systems. A Tool for Reflection, Dialogue and Progress Assessment for Ministries of Education and its Partners*. Kathmandu: UNICEF Regional Office for South Asia.

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July 2022

Relevance and Use of this Tool

This tool is designed to raise awareness and promote reflection, dialogue and assessment of progress among national and sub-national level education authorities and their partners about structures and processes to make the education system more climate resilient. Small-scale and fragmented interventions and ad hoc approaches are not sufficient to effectively plan for and respond to the multifaceted climate change crisis. A system-wide approach to climate change mitigation and adaptation in the education sector needs to be developed and anchored within national and sub-national education systems under the leadership of the Ministry of Education in each country.

This tool is one of the key outputs of the UNICEF Regional Office for South Asia (ROSA) study on the impacts of and responses to climate change across education systems in South Asia. The study was conducted between February 2020 and December 2021 with the following overall aims:

- To generate evidence on how education systems in the countries of South Asia (i.e., Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka) are monitoring, assessing and responding to the impacts of climate change.
- To identify the main educational tools and mechanisms being employed in planning for and addressing climate risks.
- To showcase the perceptions of key education sector stakeholders regarding further embedding climate change considerations and concerns into education tools and mechanisms.

As part of the study, the responses of the education system of each country to climate change have been examined in terms of the following seven key education system components:

- Policies, plans and strategies;
- Finance;
- Curriculum, teaching and learning;
- Teacher capacity development;
- Communication, cooperation and partnership;
- School/community student participation platforms;
- Monitoring, evaluation and accountability.

Predicated on the entire body of UNICEF South Asia climate change and education study findings, these *System-Wide Standards and Progress Indicators for Climate Resilient Education Systems*, have been developed covering the above mentioned seven key education system components. Each system component is headed up by a quality standard statement. Progress indicators serve as criteria for the level of rating for that standard. The four levels of rating employed are as follows: gap; latent; emerging; established/implemented.

This tool can be used periodically by Ministry of Education personnel and their partners to discuss and assess whether the education system is moving in the direction of increased climate change responsiveness and thus making progress towards climate change mitigation and adaptation goals. The tool should also prompt discussion of what still needs to be done in the education sector to respond to the climate crisis more systematically and proactively.

Where multi-sectoral working groups on climate change mitigation and adaptation exist in a jurisdiction, such groups can also use this tool to identify existing and potential entry points for contributing to education sector climate change resilience building. This, in turn, helps raise awareness within arenas of multi-sectoral collaboration and coordination. Where such multi-sectoral groups do not exist, workshops or meetings might be organized where relevant stakeholders are invited to engage in multi-sectoral dialogue using the tool.

System-Wide Standards and Progress Indicators for Climate Resilient Education Systems

Policies, Plans and Strategies

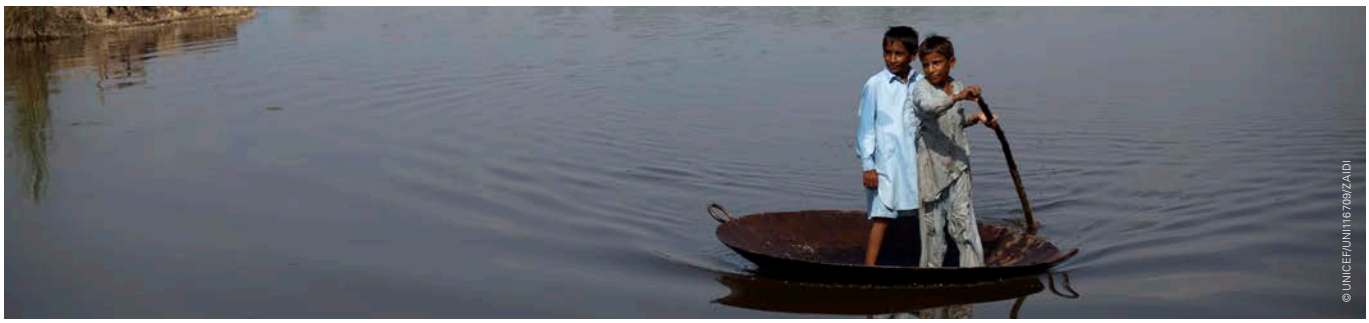
Standard: Key education policy, planning and strategy documents are well aligned with nationally defined climate change mitigation and adaptation goals; National climate change policy and planning documents recognize the needs, roles and responsibilities of the education sector.

Climate Change Response			
Gap	**Latent**	**Emerging**	**Established/Implemented**
☐ Climate change risks in the education sector are not recognized in key education policy, planning and strategy documents. ☐ Education sector's needs and potential roles are not recognized in the national climate change policy and planning documents, including the country's *Nationally Determined Contributions* (NDCs) and the *National Adaptation Plan* (NAP).	☐ While climate change risks in the education sector are generally recognized, the education sector policy, planning and strategy documents are narrowly focused on preparedness and responses to climate change-induced fast-onset disasters, with no elaborations on climate change-induced slow-onset events. ☐ National climate change policy and planning documents make only brief reference to the education sector with very little detail added. Education is not recognized as a priority sector.	☐ Climate change goals in the national climate change policy, planning and strategy documents are well-aligned with those of education. ☐ Education policy, planning and strategy documents articulate the active roles of school communities (including students) in climate action. ☐ Education policy, planning and strategy documents articulate what climate proofed schooling should look like. ☐ National climate change policy, planning and strategy documents recognize education among the main priority sectors.	☐ Education policy, planning and strategy documents (aligned with climate change mitigation and adaptation priorities) have clear and transparent implementation mechanisms, together with necessary resource allocations. ☐ National climate change policy and planning documents (recognizing education among the main priority sectors) have clear and transparent implementation mechanisms, together with necessary resource allocations. ☐ Both education and climate change policy documents are reviewed periodically for necessary refinement and update, reflecting on the implementation experiences and latest climate change risk landscape.

Finance

Standard: The Ministry of Education has equity-based resource allocations for climate change mitigation and adaptation actions, and is supported by adequate financing mechanisms.

Climate Change Response			
Gap	**Latent**	**Emerging**	**Established/Implemented**
☐ There is no or very little funding allocation for climate change mitigation and adaptation activities in the education sector.	☐ There are some education sector funding allocations for disaster preparedness, education in emergencies and/or school safety focused on climate change-induced fast-onset disasters.	☐ Key personnel in the ministries of education, finance and planning are aware of the importance and benefits of education sector financing on climate change mitigation and adaptation activities. ☐ There is a clear MoE funding framework for what constitutes a climate action budget in the education sector. ☐ MoE funding allocations for climate action are equitable so that the most vulnerable schools and students with least capacities are prioritized to effect a levelling upwards. Funding formula include climate change risks and vulnerabilities. ☐ There exist continuous efforts to diversify education sector financing mechanisms to support climate action through bilateral and multilateral funding options (e.g., Green Climate Fund, Adaptation Fund, Global Environment Facility), private sectors, NGO/CSO partners, local governments.	☐ MoE allocates annual/ periodic budget for climate change mitigation and adaptation activities. ☐ A financial tracking system/ budget coding system is established to monitor education sector budget allocation and utilization to support climate change mitigation and adaptation activities. ☐ There exist continuous and concerted efforts to identify and close education sector funding gaps leading to mobilization of support that draws on bilateral and multilateral funding options (e.g., Green Climate Fund Adaptation Fund, Global Environment Facility), private sectors, NGO/CSO partners, local governments.



Curriculum, Teaching and Learning

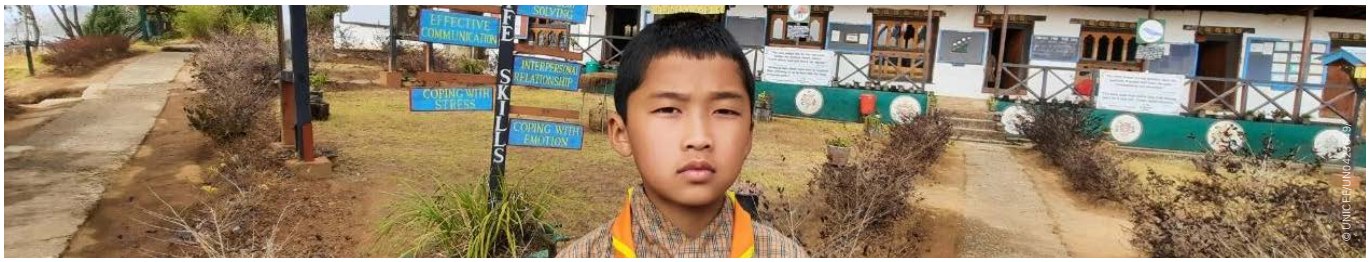
Standard: Knowledge, skills and dispositional learning outcomes for climate change mitigation and adaptation are systematically integrated in the national curriculum.

Climate Change Response			
Gap	**Latent**	**Emerging**	**Established/Implemented**
☐ Climate change-related components exist very sporadically and non-coherently in the national curriculum.	☐ Some climate change-related components exist but in limited subjects and at limited grade levels (and mainly at secondary level). ☐ Climate change-related learning outcomes are heavily knowledge-focused. ☐ The importance of learner-centered and action-oriented pedagogies is generally recognized in the curriculum documents, but their relevance to climate change learning is not articulated.	☐ Climate change-related themes and topics exist quite frequently in multiple subjects at both primary and secondary grade levels, but systematic integration is still lacking. ☐ Contextually appropriate green skills and broader life skills for climate change resilience building are identified and integrated in the curriculum. ☐ Curriculum documents articulate the importance of learner-centered and action-oriented pedagogies for climate change learning and elaborate key pedagogical modalities/ approaches. ☐ Curriculum documents also elaborate formative student assessment modalities for climate change learning.	☐ Knowledge, skills and dispositional learning outcomes for climate change mitigation and adaptation are systematically integrated in the primary and secondary curriculum through-the-grades and across-the-subjects in an interdisciplinary manner. ☐ Climate change teaching and learning support materials are also available in an accessible manner (e.g., in local languages). ☐ Teachers have the capacity to deliver climate change curriculum components by employing a range of learner-centered and action-oriented pedagogies. ☐ Teachers also have the capacity to employ a range of student assessment modalities.

Teacher Capacity Building

Standard: Continuous teacher capacity building opportunities for climate change mitigation and adaptation are available for both pre-service and in-service teachers.

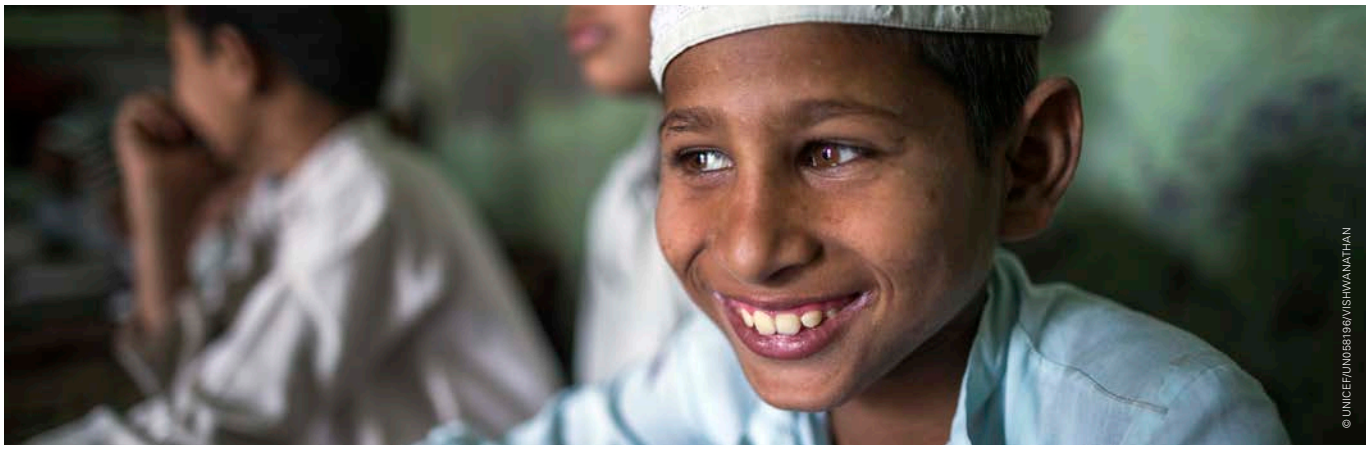
Climate Change Response			
Gap	**Latent**	**Emerging**	**Established/Implemented**
☐ Teacher education programmes, pre-service and in-service, have no or few components on climate change mitigation and adaptation. ☐ No resource and support materials on climate change are available for pre-service and in-service teacher capacity building.	☐ Ad-hoc climate change-focused teacher education programmes (for both pre-service and in-service) exist, with no follow-up support. ☐ There exist some climate change-focused resource/ support materials for teachers, but they do not consider locally specific climate change risks and vulnerabilities.	☐ Teacher training programmes, pre-service and in-service, include some components on basic knowledge and skills concerning climate change mitigation and adaptation, but they are available to only a limited number of teachers. ☐ There are some climate change-related resource/ support materials for teachers that address locally specific climate change risks and vulnerabilities to some degree.	☐ Systematic and continuous teacher capacity building (for both pre-service and in-service) are widely available covering the following areas: • Delivering climate change mitigation and adaptation components in the formal curriculum • Facilitating student climate change learning and action at school and in the community • Facilitation skills for learner-centered and action-oriented pedagogies • Employing a range of assessment modalities (formative assessment modalities in particular) for climate change learning • Helping students to address climate change-induced issues relating to health and wellbeing, child protection, Water, Sanitation and Hygiene. ☐ Follow-up support and reinforcement of teacher training is in place. ☐ Contextualized resource/ support materials on climate change are widely available for pre-service and in-service teachers.



Communication, Coordination and Partnership

Standard: Multi-sectoral, multi-level and partnership approaches are in place for developing and delivering education sector climate change mitigation and adaptation action.

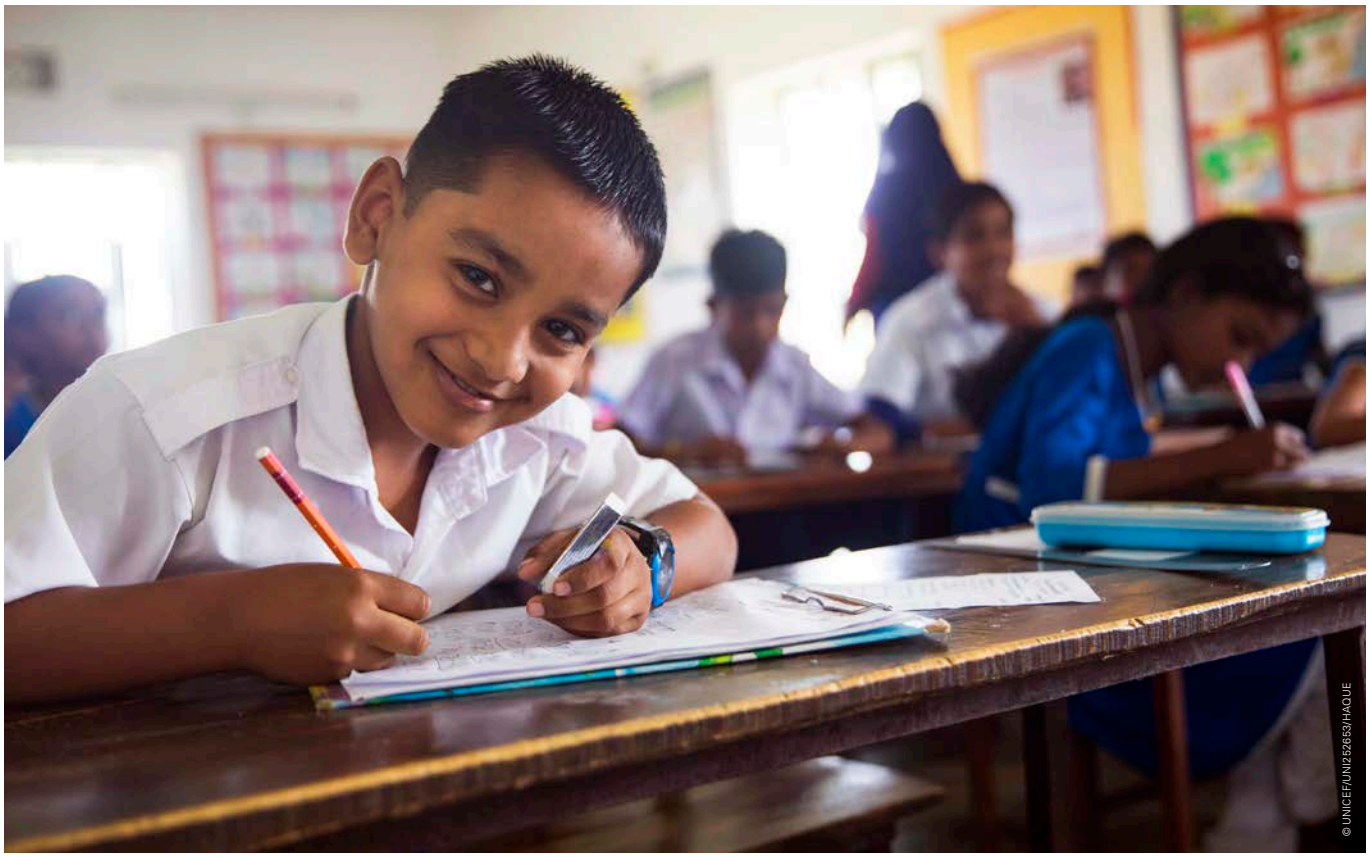
Climate Change Response			
Gap	**Latent**	**Emerging**	**Established/Implemented**
☐ There is no coordination platform/mechanism for climate change-related concerns in the education sector. ☐ No or very little communication and coordination exists between MoE and the ministry responsible for climate change.	☐ The existing education sector coordination platform/mechanism (e.g., school safety/ DRR/Education in Emergencies) pays some attention to climate change-induced disaster preparedness and risk but attention is limited to fast-onset disasters. ☐ Communication and coordination between MoE and the ministry responsible for climate change exists but is limited to one or two specific programs/ activities.	☐ The education sector coordination platform/ mechanism for school safety/DRR/Education in Emergencies focuses on reduction of multiple climate risks, including risks associated with both fast-onset and slow-onset events. ☐ MoE and the ministry responsible for climate change have established clear and regular communication channels and coordination mechanisms with dedicated focal personnel in both ministries.	☐ At national level, a multi-sectoral coordination platform/mechanism for education sector climate change resilience building exists with clear roles and responsibilities laid out for identified key stakeholders. ☐ Key stakeholders actively participate in the multi-level coordination platform/ mechanism established for education sector climate change resilience building. ☐ MoE coordinates and collaborates with the ministry responsible for climate change and also with other relevant authorities and partners for developing education sector policies/plans, formal and non-formal education programmes, teacher capacity development programmes for climate change mitigation and adaptation and overall resilience building in the education sector.



School/Community Student Participation Platforms

Standard: A greater number of students have school- and community-based participation opportunities where they can exercise and develop their change agency, advocacy and leadership capacities to accelerate climate action.

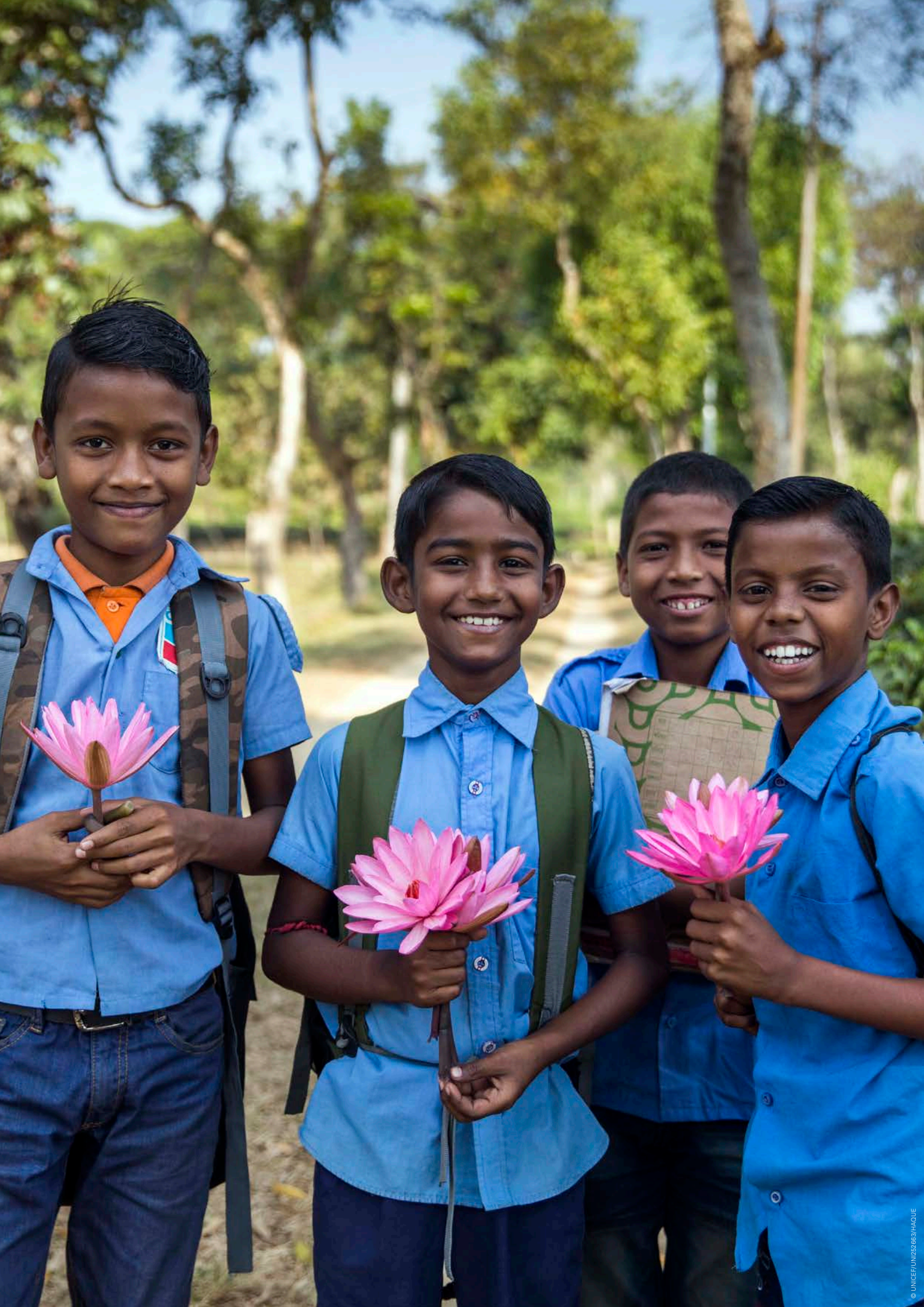
Climate Change Response			
Gap	**Latent**	**Emerging**	**Established/Implemented**
☐ There are no extra-curricular and non-formal education programmes and opportunities allowing students to obtain and apply their climate change knowledge and gain practice in exercising their skills for climate action.	☐ Existing extra-curricular and non-formal climate change programmes/ opportunities are largely dependent on voluntary efforts of enthusiastic teachers and schools.	☐ There are government-led student participation programmes for climate change learning and action, but the number of students/schools benefiting from them are limited and such opportunities are not linked to formal curriculum.	☐ Government-led programmes for climate change learning and action are available for all students - or a majority of students - in the jurisdiction. Such programmes are linked to formal curriculum and anchored in the education sector policy. ☐ School and community-based platforms are led by students themselves in an age-appropriate manner, with peer-to-peer approaches widely employed.



Monitoring, Evaluation and Accountability

Standard: Climate change impact data on the education system are systematically gathered; the data gathered are analyzed and used for evidence-based education sector policy making and planning.

Climate Change Response			
Gap	**Latent**	**Emerging**	**Established/Implemented**
☐ Climate change impact data on the education sector are largely absent. ☐ No mechanisms/tools are available to gather climate change impact data on the education sector.	☐ Some climate change-induced disaster damage data on the education sector are available but primarily for times of large-scale natural disaster. ☐ There exist no mechanisms/tools for gathering climate change impact data on a routine basis.	☐ Country-specific indicators to gather climate change impact data on the education sector are developed. ☐ MoE and non-education authorities collaborate to gather and share climate change impact data concerning schools and children.	☐ Country-specific climate change impact indicators are integrated into the existing monitoring mechanisms/ tools (e.g., Education Management Information Systems or school-level monitoring tools) and/or supplementary mechanisms/tools. ☐ Data gathered are analyzed and disseminated in easily assimilated fashion to inform evidence-based policy making and planning. ☐ Students have opportunities to contribute to data collection and analysis in an age-appropriate manner. ☐ Established data collection mechanisms are reviewed periodically for further refinement and updating.



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