Introduction

**Purpose:** This annex to the Climate Risk Screening and Management Tools is designed to provide you with more information on climate change implications for education, social services, and marginalized populations. The information is grouped into the following sub-sections, with the corresponding step from the Tool shown in parentheses:

- Climate Risks to Education, Social Services, and Marginalized Populations (Step 2)
- Adaptive Capacity Related to Education, Social Services, and Marginalized Populations (Step 3)
- Opportunities Related to Education, Social Services, and Marginalized Populations (Step 5)
- Climate Risk Management Options for Education, Social Services, and Marginalized Populations (Step 6)
- Additional Key Resources Related to Education, Social Services, and Marginalized Populations

The questions and examples provided in this annex are illustrative and designed to stimulate thinking about climate risks, adaptive capacity, opportunities, and climate risk management options. Actual climate risks will depend on the context and anticipated climate changes for particular geographies.

**Sectoral focus of this annex:** The material in this annex aligns with the following program areas of the Standardized Program Structure: ES.1 Basic Education and ES.5 Social Assistance. Note, to the extent your design involves multiple sectors, you may want to consult other relevant annexes. In particular, if any new construction or rehabilitation is anticipated, referring to the Infrastructure, Construction, and Energy Annex is highly recommended. Please note, activity-level climate risk management (CRM) for engineering design must be conducted by the Engineer of Record. See the Infrastructure, Construction, and Energy Annex for solicitation language.

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1 Marginalized populations are groups of people who are excluded, based on their identity, from political, social, and economic power and participation. Often they include women and girls, at-risk youth, the elderly, LGBTI individuals, persons with disabilities, people in linguistic minorities, indigenous people, and/or a combination of any of these identities. LGBTI individuals refers to lesbian, gay, bisexual, transgender, or intersex individuals. Further information can be found in the LGBT Vision for Action, [https://www.usaid.gov/sites/default/files/documents/1874/LGBT%20Vision.pdf](https://www.usaid.gov/sites/default/files/documents/1874/LGBT%20Vision.pdf).

2 In this document, the term "climate change" refers to both climate variability and climate change. "Climate variability" refers to variations in climate (including the normal highs and lows, wet and dry periods, hot and cool periods and extremes) and can refer to month-to-month variability, year-to-year variability, and even decadal scale variability. In this document, "climate change" refers to those variations as well as persistent change in climate over decades or longer (USAID, 2014. Climate-Resilient Development: A Framework for Understanding and Addressing Climate Change).

3 USAID Implementation of Construction Activities, A Mandatory Reference for ADS Chapter 303, defines “construction” as: “construction, alteration, or repair (including dredging and excavation) of buildings, structures, or other real property and includes, without limitation, improvements, renovation, alteration, and refurbishment. The term includes, without limitation, roads, power plants, buildings, bridges, water treatment facilities, and vertical structures.” Construction at USAID almost always occurs within another primary programming area (e.g., school building for education, hospital/clinic construction for health).

4 An appropriately qualified engineering firm under contract or subcontract with USAID for the purpose of completing the engineering design.
Tool Step 2: Climate Risks to Education, Social Services, and Marginalized Populations – Illustrative Examples and Questions

Once you have reviewed this section, you can navigate back to the Tool by clicking on the relevant hyperlink in the header.

<table>
<thead>
<tr>
<th>Physical Structures</th>
<th>Attendance and Ability to Learn</th>
<th>Instruction and Training</th>
<th>Social and Economic Services</th>
<th>Marginalized Populations</th>
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</thead>
<tbody>
<tr>
<td>● Classroom closures due to overheating school buildings caused by high temperatures.</td>
<td>● Reduced school attendance and learning success due to increasing vector-borne diseases caused by higher temperatures.</td>
<td>● Reduced teaching effectiveness and learning success due to interference with course schedules and instruction by climate impacts.</td>
<td>● Required financial or other support to help children from displaced families attend school due to damaged homes and temporary displacement caused by extreme events.</td>
<td>● Marginalized populations may be disproportionately affected by climate change if they live in areas exposed to weather extremes (e.g., flood plains), don’t have access to health care, and don’t have access to resources and amenities that can alleviate impacts from climate change.</td>
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<td>● Unsafe schools due to structural damage of school facilities caused by storms with heavy winds such as hurricanes.</td>
<td>● Reduced ability of students to learn effectively due to extreme heat.</td>
<td>● Need for schools to develop new curricula and instructional materials to train students for jobs in other sectors due to reduced employment opportunities in climate-sensitive sectors, such as agriculture.</td>
<td>● Increased need to provide vulnerable households with cash, food, or other assistance to help keep children in school due to a variety of climate-related impacts such as prolonged drought.</td>
<td>● Marginalized populations may be disproportionately affected by climate change if they live in areas exposed to weather extremes (e.g., flood plains), don’t have access to health care, and don’t have access to resources and amenities that can alleviate impacts from climate change.</td>
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<td>● Interrupted delivery of infrastructure services (e.g., supply of drinking water) due to damage to water supply and sanitation infrastructure caused by flooding.</td>
<td>● Limited school attendance, especially by girls, due to reduced ability to pay schools fees or temporary relocation of families caused by severe flooding or prolonged drought that affects livelihoods and incomes.</td>
<td>● Limited school attendance and instruction by climate impacts.</td>
<td>● Increased need to provide vulnerable households with cash, food, or other assistance to help keep children in school due to a variety of climate-related impacts such as prolonged drought.</td>
<td>● Marginalized populations may be disproportionately affected by climate change if they live in areas exposed to weather extremes (e.g., flood plains), don’t have access to health care, and don’t have access to resources and amenities that can alleviate impacts from climate change.</td>
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<td>● Flooded school facilities and damaged salt-sensitive equipment due to sea level rise and storm surge.</td>
<td>● Interrupted delivery of infrastructure services (e.g., supply of drinking water) due to damage to water supply and sanitation infrastructure caused by flooding.</td>
<td>● Reduced school attendance due to increasing time spent by girls and boys collecting food and water resources as a result of scarcity due to drought or other climate stressors.</td>
<td>● Required financial or other support to help children from displaced families attend school due to damaged homes and temporary displacement caused by extreme events.</td>
<td>● Increased risk of climate-related disasters will tend to exacerbate existing inequalities experienced by marginalized populations (e.g., increased vulnerability of women and children to sexual violence and abuse during and after disasters).</td>
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<tr>
<td>● Flooded school facilities and damaged salt-sensitive equipment due to sea level rise and storm surge.</td>
<td>● Reduced school attendance and learning success due to increasing vector-borne diseases caused by higher temperatures.</td>
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</tr>
</tbody>
</table>

5 A temporary sea level rise associated with a storm.
6 In this document, the term “migration” is used to indicate the movement of people in general, and not necessarily movement across borders.
Illustrative questions by climate stressor:
Consider both current conditions and the future conditions described in the Climate Risk Profile(s).

**Temperature:**
- Are higher temperatures likely to affect classroom conditions and learning success?
- Are higher temperatures and more humid conditions likely to affect the incidence of disease and school attendance?
- Are higher temperatures and more humid conditions likely to disproportionately impact elderly populations whose physiology is more prone to heat stress?

**Flooding:**
- Is flooding likely to damage school facilities during heavy precipitation events or rapid snowmelt?
- Is flooding likely to reduce access to schools?
- Is flooding likely to disproportionately affect economically disadvantaged populations living in flood plains or other areas that are not protected from flooding?

**Drought:**
- Is drought likely to affect family incomes and the ability to pay student fees, reducing attendance and equitable access to education?
- Is drought likely to reduce the availability of food and water, reducing the health of school children and leading to poor attendance or school performance?
- Is drought likely to disproportionately affect economically disadvantaged populations or other groups that do not have access to abundant water supply?

**Sea level rise and storm surge:**
- Is sea level rise and/or storm surge likely to flood school facilities or contaminate drinking water?
- Is sea level rise likely to displace families and require financial or other support to keep children in school?
- Is sea level rise likely to disproportionately affect populations living in coastal slums?

Illustrative questions by programming or system element:

**Physical Structures:**
- Are high temperatures likely to overheat school buildings?
- Is flooding likely to produce school outfall overflows and waste contamination?
- Are storms such as hurricanes likely to tear off school roofs or otherwise damage school facilities?
- Is sea level rise and/or storm surge likely to contaminate a school’s drinking water supply with salt water?


**Attendance and Learning Ability:**
- Are higher temperatures likely to increase the incidence of vector-borne diseases and reduce school attendance?
- Are higher temperatures likely to reduce school performance?
- Are extreme events, such as heat waves or hurricanes, likely to require students to stay home to care for ill or injured family members?
- Are floods and droughts likely to reduce food supplies, leading to under-nutrition and under-nourishment, impaired cognitive functioning, and poor school performance?
- Is drought likely to lead to crop failures and loss of income, affecting the ability to pay school fees, especially for girls?

**Instruction and Training:**
- How is projected climate change likely to affect the skills needed for workforce development? What are the implications for school curricula and instructional materials?
- How is projected climate change likely to increase the need for instruction in climate change vulnerability, impacts, and adaptation and climate change mitigation options?

**Social and Economic Services:**
- How might climate change impacts increase the need to provide vulnerable households with cash, food, or other assistance to help keep children in school?
- Are climate change impacts such as sea level rise likely to displace families, requiring adjustments in social assistance for school-aged children?
- Will climate change impacts such as sea level rise or flooding disproportionately affect marginalized peoples, such as LGBTI individuals, that are discriminated against and have reduced access to social services?

**Marginalized Populations:**
- What populations may be more exposed to drought, higher temperatures, and storms due to location, adequacy of shelter, etc.?
- How might marginalized populations be impacted by climate change, compared to populations with more wealth and the ability to mobilize services that could reduce their suffering?
- Do marginalized populations have the same access to social services that may be provided to mitigate effects of climate change?

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7 In this document “climate change mitigation” refers to efforts to reduce greenhouse gas emissions.
Tool Step 3: Adaptive Capacity Related to Education, Social Services, and Marginalized Populations – Illustrative Questions

Once you have reviewed this section, you can navigate back to the Tool by clicking on the relevant hyperlink in the header.

Information Capacity

- Is information about climate change impacts on education, social services, and marginalized populations incorporated into planning of educational systems, social services, and emergency preparedness?
  - To what extent is climate change information incorporated into the design of school facilities, including buildings and supporting infrastructure?
  - To what extent is climate change information incorporated into planning to support marginalized populations (e.g., location of government-funded housing outside of flood plains)?
  - To what extent is climate change information included in emergency planning?

Social and Institutional Capacity

- What is the capacity of institutions and civil society to take action and to adjust to climate impacts on education, social services, and marginalized populations?
  - What institutions and leadership are in place to support actions to address potential impacts and opportunities related to education, social services, and marginalized populations?
  - Are civil society organizations (CSOs) that represent marginalized populations sufficiently empowered to take action on climate impacts?
  - Are marginalized populations represented in institutions and leadership that are in place to support actions to address potential climate impacts?
  - Are community shelters and other community institutions that are in place to support adaptation to and/or relief from climate impacts inclusive of all people or will marginalized populations be denied or restricted access?

Human Capacity

- To what extent do policymakers, educators, social service providers, and local communities have the capacity to consider and address climate impacts to education, social services, and marginalized populations?
  - What is the level of awareness and appreciation of potential impacts on school facilities and educational services, social services, and marginalized populations?
  - What technical resources and organizations are in place to train and support educators, social service providers, and communities to manage climate impacts on education, social services, and marginalized populations?
  - Will local communities and marginalized populations be consulted and considered in plans to address climate impacts?

Financial Capacity

- Are there adequate financial resources to support schools, community shelters, and other community institutions in preparing for and responding to climate impacts?
Tool Step 5: Opportunities Related to Education, Social Services, and Marginalized Populations – Illustrative Examples

The need to address climate risks to education, social services, and marginalized populations may provide a number of additional opportunities. For moderate/high risk strategic elements, projects, and activities, the important types of opportunities to consider are climate change mitigation, potential co-benefits for non-climate development objectives, leveraging political will, and other development issues. For Washington-based and low-risk strategic elements, projects, and activities, opportunities should focus more on how to support resilience more broadly.

Once you have reviewed this section, you can navigate back to the Tool by clicking on the relevant hyperlink in the header.

Reduce gender inequalities in education and social services

- Projects to ensure access to schools and social services during extreme events will increase support for girls, who may otherwise be required to stay at home to care for sick or injured family members and to help collect food and water.
- Projects to ensure access to schools and social services during extreme events will increase support for LGBTI individuals, who are likely to be discriminated against.
- Making schools “climate safe” can help replace or improve inadequate or degraded school infrastructure.
- Paving roads to prevent wash-outs during floods will provide access for other needs (e.g., food, access to markets) in addition to social services and school access.

Encourage governments to place a higher priority on related development objectives

- Ensuring a safe water supply for students, educators, and marginalized populations during storms can help prioritize needed improvements in water and sanitation.
- Ensuring school access will encourage government officials to prioritize needed road improvements.

Develop synergies with other development objectives

- The need to rebuild schools after extreme events could provide an opportunity to relocate schools away from high-risk locations.
- Making schools “climate safe” will provide opportunities to develop new partnerships among educators, community leaders, emergency relief organizations, and government disaster risk management authorities.

Advance education

- Curricula incorporating climate change will help advance scientific knowledge and skills.
- Knowledge and skills needed for climate change adaptation/mitigation will encourage curriculum development in new areas and increase educational opportunities.
Prevent backsliding

- Being prepared to provide social services, and layering them with other development efforts, such as supporting the rights of marginalized populations, such as LGBTI individuals, can help avoid cycles of crisis.

Increase community awareness of climate risks and adaptation

- Incorporating climate change lessons into the curriculum will help increase knowledge and understanding of students, educators, and parents.
- Addressing climate change issues in schools can provide a platform for engaging students in developing and implementing climate change adaptation in their communities.

Contribute to climate change mitigation

- Clean energy provided by solar panels can provide power to schools that are off-the-grid.
- School design, building and maintenance practices that are geared toward carbon neutral and environmentally sustainable learning spaces can reduce greenhouse gas emissions.
Tool Step 6: Climate Risk Management Options for Education, Social Services, and Marginalized Populations – Illustrative Examples

Once you have reviewed this section, you can navigate back to the Tool by clicking on the relevant hyperlink in the header.

Help Education and Social Service Systems Use Climate Information to Support Adaptation, Particularly for Marginalized Populations

- Help school district administrators conduct risk screening and develop disaster risk management and climate adaptation plans.
- Ensure climate information informs siting, construction, and renovation efforts.
- Incorporate improved understanding of climate risks, adaptation, and climate change mitigation in both formal and informal education curricula. Educating girls and women is one of the best ways of ensuring that communities are better able to adapt and, thus, be less vulnerable to extreme weather events and climate change.
- Use social service systems to better inform marginalized populations about potential risks.

Help Education Systems and Social Services Improve Climate Risk Management

- Help identify school safety concerns (e.g., ability of physical structures to withstand extreme events) and opportunities to improve safety.
- Help strengthen the capacity of teachers, students, and social service providers to prepare for and respond to flooding and other weather-related emergencies.
- Promote avenues through which knowledge gained by learners can extend climate change mitigation and adaptation measures outside of the school or non-formal learning program and into the wider community.

Focus Efforts on Marginalized Populations

- Identify populations most at risk and target adaptation measures toward them. Populations may be at risk due to location and/or the local climate and/or marginalized due to cultural, historical, social, linguistic, or political reasons.
- Support communities to include specific measures to protect women, girls, and persons with disabilities after disasters and other emergencies.
- Empower marginalized populations with the ability and resources to spearhead adaptation efforts, particularly regarding risks that differentially affect them (e.g., reductions in water supply).
### Additional Key Resources Related to Education, Social Services, and Marginalized Populations

The following resources provide additional information related to climate risks to education, social services and marginalized populations and corresponding climate risk management options.

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Organization</th>
<th>Date</th>
<th>Length</th>
<th>Intended Audience</th>
<th>Unique Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Topic Guide: Education, Climate and Environment</em></td>
<td>N. Blum</td>
<td>Evidence on Demand</td>
<td>2015</td>
<td>45 pp.</td>
<td>Advisers working in education, environment and climate change, and infrastructure</td>
<td>Provides a structured and detailed approach for understanding the risks and opportunities posed by environmental and climatic factors on educational supply and demand at all levels and the role education and educational infrastructure can play in building the resilience of communities.</td>
</tr>
<tr>
<td><em>INEE Toolkit</em></td>
<td>unknown</td>
<td>Inter-Agency Network for Education in Emergencies</td>
<td>2016</td>
<td>n/a</td>
<td>Educators, humanitarian workers, and government officials working in the field of education</td>
<td>This Toolkit contains a wide variety of practical, field-friendly tools and resources to guide educators, humanitarian workers, and government officials working in the field of education in emergencies through to recovery.</td>
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<tr>
<td><em>Assessment and Preparedness Toolkit</em></td>
<td>Ministry of Education and Training (MOET), Republic of Viet Nam</td>
<td>MOET, UNESCO Viet Nam, and International Network for Education in Emergencies (INEE)</td>
<td>2016</td>
<td>168 pp.</td>
<td>Teachers, students, parents, community members, and local authorities</td>
<td>Practical and user-friendly guide that goes beyond the screening level to provide “best practices” for making schools safe and sustainable in the face of climate change, natural hazards, biodiversity loss, safety threats, and other risks.</td>
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<tr>
<td><em>Guide to Education in Natural Disasters: How USAID Supports Education in Crises</em></td>
<td>USAID</td>
<td>USAID</td>
<td>2014</td>
<td>24 pp.</td>
<td>USAID education offices</td>
<td>This guide aims to provide USAID Education offices with supporting information to help them respond</td>
</tr>
<tr>
<td>Title</td>
<td>Author(s)</td>
<td>Organization</td>
<td>Date</td>
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<tr>
<td>Working with Marginal Populations: An Annex to the USAID Climate-Resilient Development Framework</td>
<td>E. Carr et al.</td>
<td>USAID</td>
<td>2015</td>
<td>42 pp.</td>
<td>Development planners and practitioners</td>
<td>This document provides detailed information to help development practitioners understand the importance of identifying and addressing the situations that influence marginalized populations. It helps development practitioners understand how to identify and incorporate the perspectives, needs, and capacities of marginalized populations into climate-resilient development.</td>
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<tr>
<td>Gender and Climate Change Capacity Development Series - Africa</td>
<td>Z. Habtezion et al.</td>
<td>Global Gender and Climate Alliance (GGCA) &amp; UNDP</td>
<td>2011</td>
<td>32 pp.</td>
<td>Practitioners and policymakers, including those with experience in gender and development, as well as those with a technical background in climate change, the environment and sustainable development</td>
<td>Provides an introduction to the intersection of gender issues and climate change.</td>
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</table>