



National Risk Management Policy for the Education Sector in Guyana



Acknowledgements

The Ministry of Education has developed this National Risk Management Policy for the Education Sector in Guyana, in close collaboration with Heads of Departments of Education, representatives of the Regional and District Education Offices (REDOs), as well as some of the Ministry's technical partners (UNESCO-IIEP and UNICEF).

The Heads of Departments of Education and the REDO officers identified the impacts of risks on the education sector. They analysed the existing capacities of the education system for risk management. MoE officials also identified risk reduction measures for national and sub-national education authorities to prevent, prepare for, and mitigate crises. These colleagues provided invaluable input through their participation in several consultation workshops during the policy's development.

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Abbreviations and acronyms

ACEO	Assistant Chief Education Officer
CDB	Caribbean Development Bank
CDC	Guyana Civil Defence Commission
CDEMA	Caribbean Disaster Risk Management Agency
CEO	Chief Education Officer
CPCE	Cyril Potter College of Education
CPO	Chief Planning Officer
CRIS	Caribbean Risk Information System
CSSI	Caribbean Safe School Initiatives
DCEO	Deputy Chief Education Officer
DEO	District Education Officer
DRM	Disaster Risk Management
DRMP	Disaster Risk Management Policy
EiE	Education in emergencies
EMIS	Education Management Information System
EPA	Environmental Protection Agency
ESC	Education System Committee
ESD	Education for Sustainable Development
ESP	Education Strategic Plan
FMAA	Financial Management Act of 2003
GPE	Global Partnership for Education
GPS	Global positioning system
HFLE	Health and Family Life Education
ICT	Information and Communication Technology
IDB	Inter-American Development Bank
IDP	Internally displaced people
IOM	International Migration Organisation
MISU	Management Information System Unit
MoE	Ministry of Education
MoF	Ministry of Finance
MoH	Ministry of Health
MoHSSS	Ministry of Human Services and Social Security
MOPI	Ministry of Public Infrastructure
NCERD	National Centre for Education Resource Development
NDC	Neighbourhood Democratic Council
PSS	Psychosocial support hotline
PTA	Parent-Teacher Association
RDC	Regional Democratic Council
REDO	Regional Education Officer
REO	Regional Executive Officer
RMC	Risk management committee
SDG	Sustainable Development Goals
SEN	Special Education Needs
SIP	School Improvement Plan
SOP	Standard operating procedure
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund

Foreword

Around the world, the increase in frequency and intensity of natural hazards and crises threatens many countries. Guyana is no exception. Flood, drought, fire, and pandemics are some of the many natural risks that devastate learning communities in Guyana and hinder citizens' access to quality education.

In recent years, the Government of Guyana has promoted several measures to strengthen the capacities, reduce the vulnerabilities, and improve the resilience of our communities by developing tools for disaster risk management. However, the outbreak of Covid-19 highlighted the need to prepare for risks in the education sector. While the Ministry was able to use remote modalities to ensure contact with students and teachers and support learning continuity throughout the pandemic, many communities, especially in the Hinterland and Riverine locations, could not access digital learning modalities, exacerbating already existing disparities.

As a Ministry, we recognize the importance of strengthening disaster risk reduction within the education sector to build our resilience, save lives and protect the right to education. We are also committed to meet the international Sustainable Development Goals (SDGs) to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” Addressing these obligations, the Ministry of Education, in close collaboration with Heads of Department of Education, and with the technical support of the International Institute for Educational Planning (IIEP-UNESCO) and UNICEF, has developed this National Risk Management Policy for the Education Sector in Guyana.

This policy aims to improve risk management measures within the education sector and provide national guidance on disaster management. This policy shall become a reference document that will provide regional education officers with the appropriate tools to plan and manage risks relevant to their specific geographic areas.

This policy is another significant achievement for the Ministry of Education, and I am confident that it will spark other national initiatives towards building a disaster-resilient Guyana.

Hon. Priya Manickchand

Minister of Education

SECTION 1

Introduction



1. Introduction

1.1 Background

Every year, Guyana faces devastating losses caused by disasters. Guyana's Civil Defence Commission (CDC) has identified several natural and human-made hazards which significantly impact communities and for which risk reduction measures should be implemented. These include: flood, fire, oil spill, drought, river mishap, airport disaster, terrorism and pandemics. Besides, the climate and geography patterns of Guyana make the country particularly prone to climate change. All of these risks can affect the provision of quality education, limiting access for Guyana's children, youth and lifelong learners, and impacting on the efficient and effective management of the education system.

The COVID-19 crisis has shed light on the far-reaching consequences that such disasters can have on education. Indeed, in order to mitigate the effects of the COVID-19 pandemic, the Ministry of Education (MoE) took the decision to close all education institutions in the hope of curbing the spread of the pandemic. While the MoE was able to use remote modalities to maintain links between students and teachers, in many communities, non-existent or limited digital learning systems – particularly in remote populations and poor households – meant that students were not able to continue learning. As a result, already-existing disparities in the provision of education were exacerbated.

To withstand such crises in the future, it is essential for the MoE to have sufficient institutional, organizational and individual capacities for crisis risk management in place at both central and sub-national levels. The need for risk management capacities in the education sector is increasingly recognized in Guyana. The CDC's emergency plan refers to education and recognizes the important role that education can play in mitigating the impacts of disasters.

To further reinforce the MoE's capacities at central and sub-national levels to be prepared for and prevent the impacts of crises and ensure education continuity during and after a crisis hits, the MoE has decided to develop a national risk management policy for the education sector in Guyana. Anchored in the Education Strategic Plan (ESP) 2021-2025 – Vision 2030, this strategy also contributes to the ESP's overarching priorities, i.e. improving governance and accountability, efficiency of the education system and reducing inequities in education.

1.2 Vision statement

The vision of the Disaster Risk Management strategy is to improve risk management measures within the education sector.

1.3 Methodology

This risk management strategy was developed by the Ministry of Education in close collaboration with REDO representatives from all 10 regions and Georgetown. A series of consultative meetings and writing sessions were facilitated in order to prepare this risk management strategy which puts forward programmatic actions that will support the Ministry of Education to institutionalize risk management and improve its capacities to prevent, prepare for and respond to emergencies.

After examining the CDC's regional contingency plans, representatives from the REDOs and from the central MoE, including the Chief Planning Officer, worked together to identify those risks that impact the education sector. In regional teams, representatives analysed the natural hazards and human-induced risks that impact the education sector and the capacities of the sector to respond to these risks by utilizing disaggregated quantitative and qualitative data. This included identifying the potential effects of natural hazards on populations and the education system in Guyana. Risk profiles and hazard maps for each region were produced and representatives subsequently assessed the impact of those risks on the education system in terms of access and coverage, quality and learning, equity, and management of human and financial resources.

MoE officials and partners then analysed existing capacities of the education system to prevent, prepare for and respond immediately to crisis risks. This included discussion on the policies/strategies in place at each level (from central level to school level), technical capacities of MoE, planning and management practices including communication and coordination mechanisms throughout all emergency phases, funding (emergency fund requests, decision-making and disbursement process), local responses (school disaster management plans, emergency response included in townships development plans).

MoE authorities then worked together to identify objectives and risk reduction measures for national and sub-national education authorities to prevent, prepare for and mitigate crises.

Consultations with departments responsible for implementing the strategy and with different levels of the Ministry of Education took place after programme development.

SECTION 2

Analysing Risks to the Education Sector



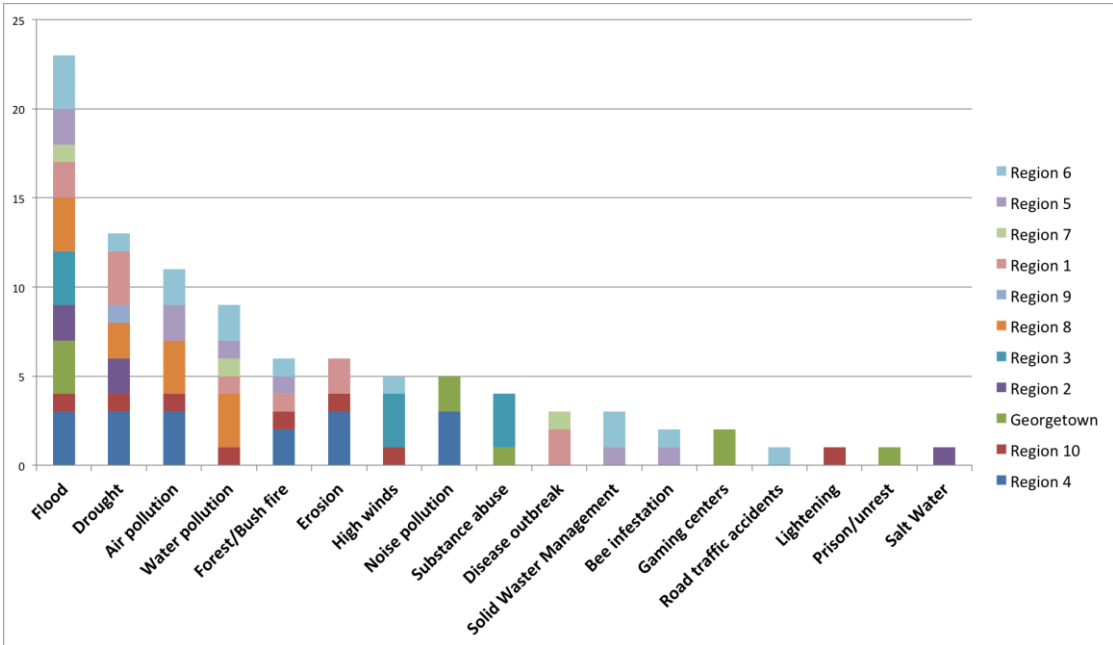
3. Analysing Risks to the Education Sector

2.1 Main hazards by region which affect students, teachers, and education facilities

This section describes the main challenges with which Guyana’s education system is confronted and provides the basis for the policy options and strategies outlined in *Chapter 2*.

Several risks impact the education system in Guyana. As illustrated in *Figure 1*, the main risks identified by ministry of education officials as having a high probability of recurrent or substantial impact on the education system in Guyana include flooding, drought, water pollution, bushfires, and air pollution. Disease outbreaks can also have disastrous effects on education, as demonstrated by the COVID-19 pandemic.

Figure 1. Hazards to the education systems in each region¹



In terms of natural hazards, Guyana is frequently exposed to **flooding**, impacting most of the regions across the country on an annual basis. Education authorities have indicated that flooding impacts on the education sector in all regions throughout the country, with the exception of Region 9. Flooding is caused by heavy rainfalls during the rainy season, coupled with clogged drains and canals, particularly in urban areas. In addition, heavy rains can trigger water levels to rise, which may lead to overtopping of sea defences and conservancy

¹ This bar chart is based on an analysis of the different risks in each region made during *Module 1*. Participants were asked to identify the different hazards that were most likely to affect education, and identify their triggers, the frequency and the probability of the hazards, and the specific districts that are likely to be affected. More specifically, this bar chart describes the different risks and their probability. For more details, the risk profiles are available in *Annex 1*.

dams. Flooding also occurs with high and spring tides in many locations, particularly due to climate-related sea level rise. The country is also exposed to **drought** during the dry season, which spans between January and April, and between July and October according to the region. While drought affects the education system in several regions (Regions 1, 2, 4, 6, 8, 9, and 10), it is particularly pronounced in regions 1 and 9. To mitigate the effects of drought, digging of wells and water harvesting projects are ongoing in affected villages and in some instances in school compounds. Finally, **bushfires**, mainly caused by excessive heat during the dry season, occur in very localized areas and affect specific populations. Nonetheless, they do have negative impacts on learners and education staff.

In addition to natural hazards, Guyana is also affected by environmental pollution, including air and water pollution, due to human activity. Six regions (Regions 1, 5, 6, 7, 8, and 10) indicated that they were heavily exposed to **water pollution**. The most common cause of poor quality water is human activity and its consequences, which include poor farming practices and the overuse of fertilizers and pesticides, improper disposal of industrial waste, and dumping of solid waste in or near waterways. Water pollution also occurs near mining communities, as a result of the subsequent run off that occurs during the rainy season. Meanwhile, overflowing and clogged drains are important causes of water pollution. **Air pollution** appears to be another risk affecting education in six regions (Regions 4, 5, 6, 8, and 10), however its impacts on education are less visible and less immediate than the other risks. Air pollution arises from high intensity winds and high temperatures, as well as dust and exhaust fumes from factories and construction sites. Pesticides are also important sources of air pollution in Guyana.

Finally, while **disease outbreaks** were only mentioned by two regions, regions 1 and 7, the COVID-19 pandemic has demonstrated that disease outbreaks can indeed have very detrimental effects on education. In Guyana, water-borne and mosquito-induced disease outbreaks such as dengue fever, malaria, and leptospirosis are quite rampant during the rainy season.

A more detailed analysis of the different risks for each region is available in *Annex 1*.

2.2 Main impacts of risks on the education sector

The main risks identified by MoE officials affect the education system differently in terms of access, quality and learning, equity, and management.

Natural hazards, human-made disasters and disease outbreaks may lead to unexpected and devastating impacts on the education system, including on education infrastructure, on learners, teachers and education staff. When they result in the destruction of buildings, facilities, school roads, and teaching and learning materials, they often lead to temporary

interruption of learning, which results in a loss of instruction time and affects the implementation of the school calendar. This may lead to an overall reduction in educational attainment and a greater number of students failing their examinations. This is also likely to put additional strain on the education system due to the need to establish remedial classes. Furthermore, natural hazards, human-made disasters and disease outbreaks tend to exacerbate vulnerabilities for girls, disadvantaged socio-economic population groups, as well as for learners with disabilities, thereby reinforcing inequities. In terms of psychosocial effects, learners with direct exposure to natural hazards are more likely to experience high levels of psychological distress and anxiety while long-term isolation due to school closures often leads to frustration, loneliness and stress. Finally, natural hazards, human-made disasters and disease outbreaks often cause budgetary strain, notably due to reconstructive works and the need to provide additional teaching and learning materials.

The following section provides a detailed overview of the main impacts of each risk on the education system.

Floods may regularly prevent learners from attending school when they result in physical damage to education facilities and access ways. In some cases, schools may be used as shelters after flooding, preventing children from going to school. The impact of flooding on access to education has also been aggravated by its health consequences, notably the outbreak in skin and water-borne diseases such as dengue fever, malaria, and leptospirosis. Flooding also affects the quality of education, notably with the physical destruction of furniture and other educational equipment, which negatively impacts learning environment. Moreover, displaced students are forced to study at home or in overcrowded classrooms when their education infrastructure is destroyed. Furthermore, the impacts of flooding may widen the gap between learners from different socio-economic groups and can also lead to increased disparities between affected and non-affected regions. Likewise, female students are more likely to be disproportionately affected by flooding as they lack access to clean and safe hygiene facilities at school. Students living in remote areas are also more likely to face barriers to continue their learning when there are significant delays in transporting the necessary teaching and learning materials as a result of flooding. Areas with poorer infrastructure are more prone to destruction, and as a consequence, students' education is more likely to be affected in these areas. Finally, floods can also negatively impact the effective management of education. They often affect access to locally-saved data, such as school records, including students' pedagogical files, and disrupt the collection of data at all levels, and especially at school level. Moreover, they tend to cause disruption in school inspection routines, as school managers, administrators and supervisors are not able to access schools. Communication with the Department of Education is also likely to be disrupted, preventing for instance timely submission of records. Finally, floods may cause budgetary strain, notably due to reconstructive works that need to be done on access ways, drainage and irrigation, river defence.

Drought also has significant knock-on effects on learners' access to education. Across drought-affected regions, many students may no longer attend schools on a regular basis, and some may drop out entirely. Furthermore, many schools in drought-prone areas do not have water for safe drinking and sanitation, leading to dangerous levels of dehydration among pupils and staff. In the absence of safe WASH facilities, girls are even more at risk of dropping out of school. Drought can also have far-reaching health implications, notably with the outbreak of airborne diseases due to unhealthy and insanitary conditions. Both the lack of water at school and the outbreak of airborne diseases may lead to unscheduled school closure. As a result of drought, many students are also most likely to be deprived of their right to access a quality education. The high rate of students' absenteeism and the irregularity and unpunctuality of teachers often lead to a loss of instructional time, which can compromise educational attainments. In addition, children may struggle to concentrate and learn due to dehydration and hunger, and due to high temperatures, which makes their working conditions uncomfortable. Furthermore, students in drought-affected areas may be tasked with fetching water every day and are more likely to miss out on their schooling. With chronic food shortages, school feeding programmes are likely to be suspended, placing an additional burden on the most vulnerable families. Prolonged drought leads to additional expenses for education communities, mainly due to the need to provide water tanks and transport potable water to schools. Finally, the increase in the cost of food supplies may necessitate repurposing the allocation of funds.

Bushfires are also among the most destructive natural hazards, and they are very likely to contribute to temporary unscheduled school closures mainly due to smoke pollution and forced displacement of learners and teachers, leading in some cases to a shortage of teachers, and subsequently resulting in learning loss. Learners who have directly experienced may have significantly higher levels of psychological distress and anxiety. Learners and teachers with respiratory ailments are at higher risk and thus are more likely to be absent. Underprivileged learners are also more vulnerable as they face more difficulties to access quality health care. Furthermore, bushfires can lead to occasional interruption of scheduled administrative and other planned activities at school level such as staff development sessions, supervision routines, PTA meetings, SIAC meetings, finance committee meetings, etc. Bushfires may also negatively impact the effective management of education as it disrupts the collection of data at school level.

Guyana is also heavily exposed to **water pollution**, which tends to cause skin and infectious diseases, forcing learners and teachers to miss school and compromising access to education. Water pollution is also likely to affect education outcomes as it has serious effects on students' growth and development. In addition, the lack of drinkable water at school may impede the provision of school meals, which decreases student's attendance as many of them rely on school meals. The malnutrition of students often leads to low levels of concentration and affects students' academic success. Similarly to students affected by

drought, some students may have to travel long distance to fetch non-contaminated water on a daily basis, resulting in physical fatigue. These learners are more at risk of dropping out of school. The absence of potable water at school may also increase school expenses, due to the need to transport potable and fresh water to schools. Finally, water pollution will likely unequally affect learners. Schools with strong PTA's and other support systems may be able to afford water purification systems at their schools while less fortunate schools will not be able to afford these systems. Likewise, families whose incomes depend on the rivers are more likely to be affected and find themselves under financial strain. As a result, children might be asked to contribute to the expenses of the household, which in the long term may result in school dropout.

In addition to water pollution, the country is also highly affected by **air pollution**. Exposure to air pollution adversely affects learning processes, causing respiratory illness and fatigue and potentially leading to absenteeism. Learners and teachers with respiratory ailments may not be able to attend school while in some areas, it has been reported that stench emanating from livestock and poultry farms occasionally prevent other students from going to school. Besides, learners and teachers living close to factories, sugarcane estates and sawmills are more likely to be absent from school.

Finally, **disease outbreaks**, such as the COVID-19 pandemic can lead to countrywide school closures. Such outbreaks tend to have long lasting effects on the delivery of quality education. The transition from face-to-face traditional education to online learning often takes time and is hampered by the lack of access to IT infrastructure and equipment, which tends to further marginalize the most vulnerable students who do not have access to digital platforms and devices to access online classes. In some situations, learning is completely interrupted due to the absence of online platforms. In addition, ensuring quality online education is challenging due to the lack of teachers' capacities in supporting students at a distance and in maintaining their attention and motivation. As a result, there are increased risks that students fall behind in their learning or drop out of the system entirely. Likewise, many students cannot rely on household support while learning at home, as parents may be working or may not have attended school themselves. In terms of psychosocial effects, long-term isolation and limited social contacts often lead to frustration, loneliness, and anxiety, for both learners and education personnel. Finally, disease outbreaks are likely to bring additional challenges to the management of the education system, such as the interruption of supervision processes and the disruption of PTA and other community-based structures.

SECTION 3

Risk management capacities in the Education Sector



4. Risk management capacities in the education sector

The next step in analysing risks and their impact on the education sector is to identify available capacities in place to address these risks and the education needs of displaced populations. Understanding the roles of key stakeholders and identifying existing institutional, organizational and individual capacities for risk management in the education sector can clarify how the education system can positively contribute to crisis risk reduction. At the institutional level, this includes an analysis of the normative frameworks for risk management that may exist within the public administration. At the organizational level, examining coordination and procedures and processes that are in place is essential. And finally, at the individual level, it is important to understand to what extent individuals, from learners to education staff at school, sub-national and national levels have basic skills of planning for crisis risk reduction and for addressing the education needs of displaced populations.

After a description of the key stakeholders engaged in risk management in Guyana, this section describes the strengths and weaknesses for risk management in the education sector in Guyana.

4.1 Stakeholders for risk management

There are several key organizations and individuals already available with significant experience and technical skills in dealing with disasters, conflict, and displacement in Guyana. Some of the key actors engaged in the risk management in Guyana include:

- Caribbean Disaster and Emergency Management Agency
- Ministry of Education
- Civil Defence Commission
- Ministry of Health
- Ministry of Public Infrastructure
- Environmental Protection Agency
- Regional Democratic Councils

The following paragraphs provide a detailed description of the role of these key stakeholders.

The **Caribbean Disaster Risk Management Agency (CDEMA)** is the Caribbean Community's intergovernmental agency for disaster management. To date, CDEMA is comprised of 18 participating states, including Guyana. CDEMA's mandate is to facilitate, drive, coordinate, and motivate the promotion of and engineering of Comprehensive Disaster Management. Its main functions include the mobilization and coordination of disaster relief, the dissemination of comprehensive and reliable information on disasters to the

participating states, and the coordination of the development of a disaster loss reduction culture among participating states. In order to improve information sharing among CDEMA's participating states, the Caribbean Risk Information System (CRIS) was formed. CRIS is a virtual platform that hosts risk management data in order to facilitate the analysis and research on risk management and climate change adaptation. Additionally, in 2017, CDEMA launched the Caribbean Safe School Initiatives (CSSI), which is aimed at motivating governments to develop national strategies to implement school safety.

The **Guyana Civil Defence Commission (CDC)**, established in 1982, is Guyana's National Disaster Coordinator under the CDEMA and is a key actor engaged in risk management at the national level. The CDC outlines disaster and contingency plans for action to mitigate the effects of disasters. It coordinates the national system for Disaster Risk Management in Guyana. The main functions of the CDC is to assist local communities in developing DRM programmes; ensure the promotion and development of disaster management measures for emergency relief and support; promote the adoption of disaster loss reduction strategies, policies and practices; and establish, develop and promote disaster management training in Guyana.

Guyana's **Ministry of Education (MoE)** is the key driver of the development of the education sector's risk management strategy. The MoE is one of the CDEMA countries that have adopted and ratified the National Safe School Programme. To this end, the Ministry with the assistance of UNICEF has established a National Safe School Committee. In addition, the MoE has conducted a National Building Condition Survey, which include many of the elements of the safety assessment. Besides, the MoE has conducted pilot assessments of some schools in Georgetown and the coastlands of Guyana using the CDEMA tool. In order to effectively carry out its mandate, the MoE has implemented several policies and standards, including a Disaster Preparedness Policy, a Protocol for Safe and Secure Schools and Order and Discipline in Schools, and a Policy on Requesting Funds in Schools.

As emergencies and disasters take a profound toll on health and wellbeing, it is increasingly recognized that Ministries of Health have a primary responsibility to manage national health strategies and coordinate with the national disaster management agency. To this end, the **Ministry of Health (MOH)** of Guyana plays a key role as the national public service agency mandated to deliver and oversee the delivery of healthcare throughout the country and to effect plans and policies to aid in this regard. Enacted by way of the Ministry of Health Act 2005, the Ministry strives to ensure the physical, social and mental health of all Guyanese by ensuring that health services are accessible and affordable.

Another important actor for risk management that should be called upon to inform the education sector's risk management strategy is the **Ministry of Public Infrastructure (MOPI)**, Guyana's focal point for the planning, creation and maintenance of major civil works

infrastructure. It is the Ministry's mission to plan, build and maintain reliable, safe, efficient and cost-effective road networks, sea and river defence system and other important infrastructures. MOPI also supports the safe movement of people, goods and services and reduce the cost of transportation.

In terms of environmental protection for risk management, the **Environmental Protection Agency (EPA)-Guyana**, established under the Environmental Protection Act 1996, plays a key role as the agency responsible to implement the provisions of the 1996 Act as well as its Amendments (2005) and Regulations. The Agency's work encompasses areas such as air quality and noise, freshwater, waste, biological and land resources, research and development, ecological and human health risk, education, communication, and awareness.

Finally, another important stakeholder involved in disaster risk management is the **Regional Democratic Council (RDC)**, the supreme Local Government Organ in each region with the responsibility for the overall management and administration of the regions and the coordination of the activities of all local Democratic Organs within its boundaries. RDCs are the second tier of educational management in Guyana. Through their Regional Executive Officers (REOs), they are responsible for the mainstreaming of national policies at the regional and local levels.

4.2 Institutional capacities - Policies and plans for risk management in Guyana

In terms of institutional capacities for risk management, it is key to identify international, regional, national policies and/or legal instruments that take into account risk reduction issues or emergency preparedness. In Guyana, these include the Sustainable Development Goals, the Sendai Framework for Disaster Risk Reduction, the National Disaster Management Policy (2013), and the Education for Sustainable development Policy (2016). Guyana's national strategy for development is aligned with the country's commitments under the United Nations Sustainable Development Agenda and Goals (SDGs). Several of these commitments address educational attainment and disaster risk reduction. Specifically, SDG-4 seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".² In addition, there are targets under SDG-11 ("Make cities and human settlements inclusive, safe, resilient and sustainable") and under SDG-9 ("Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation) that highlight the importance of institutionalizing risk management.

Besides, Guyana endorsed **the Sendai Framework for Disaster Risk** following the third United Nations World Conference on Disaster Risk Reduction in 2015. The Sendai Framework reinforces the UN's commitment to strengthen disaster risk reduction efforts. It sets out seven overarching targets to support global progress assessment. Since then,

² United Nations. The 17 Goals. <https://sdgs.un.org/goals/goal4>

Guyana has recognized the need to be proactive to ensure that disaster risks do not undermine the development of the country, and to this end, the country has made considerable strides towards supporting the achievement of the seven global targets of the framework.

At the national level, the **Disaster Risk Management Policy (DRMP)** of 2013 forms part of a comprehensive framework of policies and strategies that emphasize proactive, prospective and preventative measures that address disaster risks.³ Building resilience and reducing vulnerability are elemental organizing principles of the DRMP. The policy encompasses and recognizes duties, roles and responsibilities for a variety of institutions, ministries, agencies, stakeholders' sectors and interests. One of the strategic objectives of the DRMP is the mainstreaming of disaster management into developmental policies, planning processes, land management and financials, and formal and non-formal education systems. In addition, this policy aligns itself to the objective of ensuring that schools in high-risk areas develop and implement disaster preparedness and contingency plans. Aligned with this policy, several other legislations and policy documents have been drafted, including the Disaster Risk Management Bill (2013), the Integrated Disaster Risk Management Plan and Implementation Strategy (2013), the Early Warning System Plan (2013), the Multi-Hazard Preparedness and Response Plan (2017).

With regards to the education sector, the Ministry of Education developed the **Education for Sustainable development (ESD) Policy** in 2016.⁴ This policy seeks to introduce the principles of sustainability in all aspects of the formal, non-formal and informal education system in Guyana. The implementation of this policy supports the Government of Guyana's Vision 2020. It is through this policy that Guyana aspires to achieve SDG-4 Target 4.7.⁵ The goal of the MOE's ESD adopts a two-fold approach, which aims to integrate sustainable development into education and integrate education into sustainable development.

In addition to the above-listed international, regional, and national policies, it is key to identify normative frameworks that support these policies, especially the national education policy on risk management. These normative frameworks include the Education Act, the Protocol for Safe and Secure Schools and the Code of Practice for Buildings.

³ UNDP. Disaster Risk Management Policy Guyana. 2013. <http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/8.%20Disaster%20Risk%20Management%20Policy.pdf>

⁴ MOE Guyana. Education for Sustainable Development. <https://education.gov.gy/web2/index.php/policies/78-education-for-sustainable-development/1489-education-for-sustainable-development>

⁵ United Nations. SDG-4.7. « By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development. »

The **Education Act** (1877) makes provisions for the promotion of Education in Guyana. The act established the Ministry of Education and places the authority for the establishment, management, and maintenance of schools or other places of education for the provision of nursery, elementary, secondary or further education, within the confines of the Chief Education Officer (CEO). The act guides all related educational activity including the safety of schools.

The Ministry of Education recognizes the need to inculcate a culture of safety and security in all schools. To this end, the MoE developed the **Protocol for Safe and Secure Schools** (2011) that aims to create a safe and secure school environment where teachers and administrators can effectively fulfil their duties, and where students can concentrate on learning. Achieving this end requires that every schools develop a School Safety Plan which is aligned with the broader guidelines. This plan will guide action towards a safer learning and working environment. The protocol also outlines the role of the school administrator, teachers, students, parents, and other educational personnel and insists on their key role as essential element in creating and maintaining safe and secure school environments.

Finally, while it was acknowledged that the MOPI plays a key role in building and maintaining reliable and safe infrastructures, the **Code of Practice for Buildings** (2005) was identified as a key national legislation for risk reduction. Amongst others, the Guyana National Bureau of Standards Code of Practice for Building provides a set of rules that specify the minimum accepted level of safety for infrastructures. This set of rules is also applicable to educational infrastructures.

4.3 Organizational arrangements and coordination for risk management in Guyana

This section describes the organizational capacities for risk management in the education sector that are in place in Guyana, looking specifically at organizational procedures and coordination arrangements, contingency planning, infrastructure and equipment norms, and budgetary decisions and financial resource mobilization.

4.3.1 Organizational procedures and coordination arrangements

Disaster management procedures and protection measures

In case of emergencies, Guyana schools have fire and other evacuation plans that include a standard and adaptable framework that guide local school disaster management. These plans are expected to be on display in the school facilities.

Additionally, a national strategy for the reopening of schools was prepared and circulated to the secondary schools throughout Guyana at the outset of COVID-19 outbreak. Progressively this strategy continues to be shared with other sub-sectors of the education system.

Guidance on these plans is initiated by the MoE and is disseminated to the regions and subsequently to education officers who disseminate to school principals.

Across the country, there is a lack of standard operating procedures (SOPs) in place for floods, drought, conflict or civil unrest, public health emergencies, displacement or fires. Educational material such as education kits, manuals, etc. may not be available to ensure rapid school reopening. For example, in case of flooding, experienced public officers working in different departments may be aware of what is expected from them, but a newly appointed member of staff might not have a kit or manual to guide them.

Furthermore, there are no alternative locations and methods for continuity of learning included in local and sub-national plans. Past experiences have shown that following a natural hazard, education facilities have occasionally been used as emergency shelters.

It is important to highlight that communities and parents' associations are not currently involved in disaster management and emergency planning for schools. Parents are already involved in creating School Improvement Plans (SIP) for schools, and this could lead to greater collaboration and contribution to a plan for disaster management and emergency planning once factored into the SIP Matrix. Also, PTAs (parent-teacher associations) should be oriented with guidelines on their roles related to improving disaster management and emergency planning for schools through their scheduled annual activities.

There is an established process for the physical protection of education facilities, teachers and learners from risks. In this process, security guards play a major role in reporting risks. Their supervisory booklet includes information about the physical facilities and thereby also provides information about possible risks.

In addition to these protective measures, there are monitoring and reporting mechanisms for psychosocial protection of learners such as the welfare system and the guidance and counselling departments. Furthermore, there are psychosocial services available to support education personnel, and mobile psychosocial support units are also available for the benefit of the wider school community.

Coordination arrangements

There are coordination mechanisms in place to manage Education in Emergencies (EiE) between ministries and departments at different levels. At the national level, representatives from the MoE sit on the National Task Force for Disaster Management. Meetings are held through the CDC on a monthly basis or when the need arises. At the regional level, for example in region 6, the head of the Department of Education receives training and is part of the National Task Force for Disaster Management, regularly attending

planned meetings for disaster management. Every region has their own regional task force for disaster management that receives information from the National Task Force for Disaster Management.

Collaboration between the CDC and the MoE takes place with diverse institutions at different levels. At the national level, the MoE representative is part of the CDC Task Force and attends monthly meetings. In addition to this, every year a CDC officer takes part in the Safe School Assessment team representing the MoE's Safe School Competition. At the regional level, representatives from the Departments of Education in the regions sit on the Regional CDC Task Force.

Furthermore, there is currently collaboration between the Ministry of Human Services and Social Security and the MoE. At the national level, this collaboration provides public assistance to parents of needy children at schools. It also provides support to the Welfare Department for children who were abused at home and supports children in orphanages and foster homes who attend schools. At the regional level, support is provided in the latter two categories.

Finally, there is a current collaboration between the Ministry of Health and the MoE. At the national level, the Ministry of Health visits schools to carry out vaccinations and distribution of medicines with parents' consent. At the regional level, the Regional Health Officer and the team are in charge of the same duties.

Data collection

The Education Management Information System (EMIS) enables assessment and planning for crisis risk reduction. Teachers, school administrations, the Department of Education, the Central Ministry, the CDC, the joint services (police, fire, army), the Red Cross, the Ministry of Health, healthcare centres and medical personnel, the Environmental Protection Agency (EPA), the National Emergency Task Force, community workers, volunteer groups and development partners are the actors who collect data during and after emergencies. This data includes information and specific questions about internally displaced people (IDPs).

The information is shared within the MoE weekly, monthly or as the need arises through the following offices:

- CEO
- DCEO A
- Planning Unit

The authorities of the MoE have advised that a central mechanism, with a constantly updated dashboard, needs to be established to capture and share data. This will also ensure fewer variations in collected and shared data since a standard established format can be used.

Outside the MoE the data is shared by:

- The Planning Unit
- The Task Force Established for Specific Emergencies
- Regional information officers
- Public Relations Department

Once the information-gathering process is completed, an analysis of the information takes place to inform decision-making for infrastructure repairs and maintenance, and to estimate the human, material and financial resources required for recovery processes. It informs decision-making with data on procurement (in relation to restoration of property), human and material resources required and financial and budgetary needs. It also guides the response needed from external supporting agencies (EPA, CDC, NDC, City Council, MoH, etc.) and helps schools to review disaster management plans and contingency plans based on data collected.

4.3.2 Infrastructure and equipment

Location of school sites

The school site location policy does not currently consider areas at risk of disaster, and the location of school sites does not take into account elements such as the quality of the soil, water drainage, flood risks or distance from known fault lines. The lack of safety along routes to and from schools is another important issue that is not sufficiently addressed at present. For example, some children live miles away from school and are at risk from wild animals such as snakes or falling rocks from mountains.

School construction norms

Specific disaster-related construction and design standards have not been developed and implemented for schools. In Guyana, some schools primarily in the hinterlands are not fenced and there are some education facilities that do not have adequate water, sanitation or hygiene facilities to prevent illness and disease.

Equipment norms

Specific norms such as fastening furnishings and equipment against earth tremors, protecting supplies from falling or rising water, and the use of doors that open outwards for safe exit have not been developed and implemented. This raises concerns for the protection of students or staff and the safeguarding of educational equipment and teaching and learning materials. The only exceptions to this lack of norms are the technical institutes.

School maintenance

In practice there are reporting mechanisms such as the conditions' survey for schools to notify authorities of damage to their premises as a result of hazards, but there are not enough resources available to regularly implement the survey and maintain the school grounds and facilities and ensure disaster resilience.

4.3.3 Budgetary decisions and financial resource mobilization

The Education Sector Plan (ESP) does not include costs and financing for risk management. Although emergency-prevention activities are not costed or integrated into the national education sector budget, emergency-preparedness activities are indeed costed and integrated.

At the different levels, the MoE is able to rely on other sources of national funding such as the national treasury in emergency situations. At the regional level, there are specific funds, which are taken from specific emergency budget lines, provided for the prevention and management of emergency situations. As part of the planning and budgeting process, all regions budget annually for cleaning and fumigation as a preventative mechanism for schools. Also, extra cleaning supplies are procured for schools prone to flooding.

The MoE provides funds to ensure the ongoing safety and maintenance of school facilities. After a disaster, schools have different mechanisms to request funds for the repair or reconstruction of infrastructure and equipment and to provide teaching and learning materials. In the case of physical damage to the infrastructure, the regional engineer/clerk of works visits the site to conduct an assessment of the damage, after which a funding proposal is submitted to the Department of Education. During the current pandemic, the department is utilizing its budget to replicate teaching/learning materials and send them to schools. In some regions there are also infrastructure committees that conduct the assessment.

After a disaster, the time frame to request funds to repair or reconstruct infrastructure or provide teaching materials and learning materials depends on the topography of the region. In some regions (1, 7, 8 and 9) access to affected schools can take anywhere from three days to one week. In region 7, access to schools can depend on the water level and availability of chartered flights into the affected area. This can result in journeys taking as long as five days one way to the village. This has an effect on the budget.

Additional funding sources including UNICEF, UNHCR, UNDP and IOM to name a few have been mobilized to support schools receiving displaced children and youth. For example, UNICEF has conducted a technical assessment of schools that would have to cater for displaced children.

The reality is that there is a lack of the necessary financial resources available to manage risk within the MoE. To prevent and respond to emergencies it is necessary to mobilize

additional financial resources from different state agencies, including the national treasury. For example, in the case of the pandemic funds are usually provided through the national treasury.

Finally, it is important to remark that there is a need for the integration of risk management and financing into the ESP. Although emergency-preparedness costing is carried out at the central and sub-national levels, as it relates to known seasonal emergencies such as floods, fire, etc., it is necessary to raise awareness that this “perceived routine process” is an emergency-preparedness programme. It is a fact that there are hindrances to rapid response in emergency situations. Obstacles to timely access – for example, weather conditions or the need to charter flights – have implications for budgeting and resource mobilization.

4.4 Individual capacities for risk management in the education sector in Guyana

As previously mentioned, individuals, from learners to education staff at school, sub-national and national levels should have basic skills of planning for crisis risk reduction and for addressing the education needs of displaced populations. This section describes the individual capacities by examining the extent to which curricula in Guyana include risk reduction themes, including both prevention and response content. This section also looks at how teachers are managed, including their deployment in crisis settings, and their professional development.

4.4.1 Curriculum for risk management

Curriculum: prevention

In line with preventing natural hazards and the impacts of climate change from having disastrous consequences on the education system and communities, disaster risk reduction and environmental protection (use of water, agricultural practices, and environmental awareness) are integrated into the current curriculum that is being used. For example, the secondary curriculum covers agriculture science, integrated science and social studies. More specifically, to reduce conflict risk, themes around conflict prevention such as civic education, life skills, human rights education, critical thinking and diversity are integrated into the formal school curricula. This content is reflected in subjects such as health and family life education (HFLE) and social studies. At the tertiary level, geography is included in the curriculum.

Good progress has been made towards addressing gender inclusiveness at the nursery level, and the framework for the renewed curriculum reform includes issues related to gender inclusiveness and climate change adaptation for primary and secondary levels.

To reduce the risk of public health emergencies, hygiene and health components (hygiene, communicable diseases, nutrition) are part of the formal school curriculum. This is reflected

in the subjects HFLE, sciences & food, and nutrition at the secondary level. At the primary level, the content is in integrated science and HFLE.

Curriculum: preparedness

The curriculum does not provide specific knowledge and practices to be used in the case of an emergency. Emergency drills are only carried out for fire and are supposed to be regularly conducted for all education facilities in regions at risk of disaster or conflict.

Curriculum: for forcibly displaced children

Measures to help displaced learners catch up with their standard age within the curriculum have not yet been taken into account. Furthermore, no additional language classes are currently provided for where there are language differences between the host and displaced populations.

4.4.2 Teacher management

Teacher deployment and remuneration

Teachers are key actors in the system. They are deployed across regions based on a needs assessment and where they live. Financial incentives, accommodation, and food supplies are often available for teachers who are deployed to teach in all hinterland areas. Furthermore, teachers deployed to at-risk areas are awarded additional points with regard to senior promotions.

In emergency situations, procedures have not yet been developed for the rapid recruitment and mobilization of teachers (for instance in displacement settings) but special mechanisms have been established to avoid interruptions in the payment of teachers' salaries.

Teacher training

Principals and teachers are not currently trained to take into account relevant natural hazards, conflict risks or crisis risk reduction. Regrettably, teachers have not yet been trained to support displaced children and help them work through the possible effects of the trauma resulting from their displacement.

The pre-service and in-service teacher training programmes include courses on inclusive and participatory education, non-discrimination, non-violence, and acceptance of diversity, through the special needs' curriculum. These aspects encourage positive attitudes and can contribute to fostering social cohesion. Moreover, through the HFLE curriculum, teachers are encouraged to help learners engage in critical thinking, peaceful dispute settlements, and respect for different opinions.

Training for MoE officials

Officials from the MoE at national and regional levels are to some extent, trained to take natural hazards into account. Some officers have been trained on disaster management and school safety. However, they are not trained to take conflict risks into account nor to address the specific needs of displaced populations.

Educational planners are not yet systematically trained in integrating crisis risk reduction, forced displacement or social cohesion into education sector planning. Furthermore, officials do not systematically collect risk-related education data.

SECTION 4

Risk management Strategic Framework



5. Risk Management Strategic Framework

This risk management strategy was consultatively developed by the Ministry of Education to institutionalize risk management and improve its capacities to prevent, prepare for and respond to emergencies.

5.1 Programme areas

This strategy is structured around three main programmes: i) access, ii) quality, iii) management. Each programme contains a series of sub-programmes and their related activities that need to be implemented to ensure all students, including the most socio-economically vulnerable, can learn without disruptions in safe learning environments after a crisis.

The three main programmes are presented with their sub-programmes and the related objectives in the figures below.

Programme 1: Access

Strategic Objective: Ensure equitable access to education and a safe and protective learning environment to all children and youth affected by crises

Outcome indicator: Improving access to and the efficiency of the education system and reducing inequities in education

Sub-programme 1.1: Education Facilities

Specific objective: Education buildings and facilities are maintained and resilient to hazards

Sub-programme 1.2: Digital infrastructures

Specific objective: Ensure equitable provision of digital infrastructure to vulnerable communities are in place to support learning in times of crises

Sub-programme 1.3: Access of girls and children in vulnerable situations

Specific objective: Girls and children in vulnerable situations are ensured a continued access to education during and following a disaster

Programme 2: Quality

Strategic Objective: Improve teaching and learning processes and modalities in crises

Outcome indicator: Improving performance and psychosocial support at all levels

Sub-programme 2.1: Teaching and learning materials and conditions

Specific objective: Teaching and learning materials are continuously available following an emergency, and teaching and learning conditions are safeguarded to ensure safe learning environment

Sub-programme 2.2: Teachers

Specific objective: Teachers are trained on adapted pedagogical approaches

Sub-programme 2.3: Psychosocial needs

Specific objective: Education personnel and teachers are systematically trained to provide emotional and mental wellbeing support to students

Sub-programme 2.4: Loss of learning

Specific objective: Alternative curriculum and assessment are developed to take into account and fill the learning gap following an emergency

Programme 3: Management

Strategic Objective: Improve capacities for managing crises

Outcome indicator: Improving governance and accountability

Sub-programme 3.1: Planning for risk management

Specific objective: Education Officers and school heads and deputies are trained to develop, implement and monitor risk responsive strategies in their sphere of operations

Sub-programme 3.2: Communication and coordination

Specific objective: Risk coordination and communication strategies are developed and functioning to withstand natural and other hazards at regional and school levels and ensure access to and continuity of quality education

Sub-programme 3.3: Data management and use

Specific objective: Risk management data and Information systems are integrated into existing data systems and instituted at central, regional and school levels, to support reporting and monitoring during and after crises

Sub-programme 3.4: Budget and finance

Specific objective: Financial management processes and budget established and provided at all levels to support emergency/risk response and prevention measures

An equity and gender-sensitive lens have been used and mainstreamed throughout the process.

The following sections present each of the three programmes of the risk management strategy. Each section begins with a description of the impacts of the identified risks on the education sector and the main weaknesses of the sector to respond to crisis. Subsequently, the strategic actions that have been identified by Ministry of Education officials are presented, followed by a description of the key stakeholders that will be tasked with implementing the strategic actions.

5.1.1 Programme 1: Access

Strategic objective: Ensure equitable access to education and a safe and protective learning environment to all children and youth affected by crises

Sub-programme 1.1: Education facilities

Specific objective: Education buildings and facilities are maintained and resilient to hazards

Justification and main challenges

Evidence shows that it is essential to invest, inter alia, in infrastructure and maintenance of education facilities, to create a safe and conducive learning environment. However, education officials in Guyana have identified several weaknesses with regards to infrastructure of education facilities, including policy-level challenges and issues with quality standards.

For instance, the Ministry does not have a policy on school site location, hence schools' locations do not take into account exposure to hazards. This together with the poor-quality construction, may expose education facilities to various types of hazards.

The education facilities are not disaster resilient also because there are insufficient resources allocated for regular condition surveys and adequate maintenance and lack of maintenance plans at the regional level. The insufficient capacities at sub-national levels often result in a reliance on the central-level Engineering Department or on external contractors for maintenance and rehabilitations. When maintenance needs are not taken into account in a timely fashion, teaching and learning may be subject to disruption.

When a hazard hits, the result is often a disruption and loss of instructional time because of: damaged and/or destroyed education facilities and equipment, inaccessible schools due to unsafe and interrupted roadways, lack of alternative temporary spaces and use of education facilities as shelters. To ensure continuity in the education provision, displaced students are often hosted by other schools in overcrowded classrooms or stay at home. The lack of or

insufficient school absorption capacity can cause the suspension or the delay of the learning activities and affect children’s educational outcomes and their overall development.

School buildings and premises need to achieve a set of safety and resilience standards that reduce their exposure to hazards. Schools can consult with experts from local government, education officers and officers of specific departments to carry out assessments of complex structures – including the physical environment of the school premises. The identification of hazards in school areas and the exposure to hazards of other structures in the premises is a key step in defining the vulnerability, the actions and resources needed and the department/institutions responsible for carrying out the work.

Sub-programme activities and key stakeholders

The prioritized strategic actions that can make the education buildings and facilities regularly maintained and resilient to hazards are the following:

1. 1.1	Update and harmonize education facilities construction codes
1. 1.2	Undertake regular school maintenance
1. 1.3	Undertake timely rehabilitation and retrofitting of damaged school facilities
1. 1.4	Monitor the status of the education facilities by implementing the conditions’ survey biennially
1. 1.5	Develop biannual maintenance plans
1. 1.6	Develop a database with alternative 'safe' buildings
1. 1.7	Develop cooperation agreements between the Departments of Education and Engineering/Public Works Department
1.1.8	Establish and build multi-sectoral partnerships for flood control

As an integral part of the MoE’s mandate to improve school facilities nationally, the integration of school mapping as a planning tool will inform the implementation of the activities in this sub-programme. The Building/Special Project Unit of the central Ministry of Education and the Regional Civil Works Departments will be responsible for:

- i. Updating and harmonizing education facilities’ buildings and construction codes, including for bridges and access ways to schools. The construction codes will ensure, inter alia, that infrastructure quickly drains the water from the land (e.g. workable pumps at hand); that shelves are at least six inches off of the floor, construction is done above the ground level and that all buildings are built with washroom facilities.)
- ii. Undertaking regular school maintenance, based on the assessments and monitoring reports, and timely rehabilitation of damaged school facilities as per 'inclusive' building codes and standards
- iii. Monitoring the status of the education facilities (regular, maintenance and damaged facilities under rehab) by implementing the conditions’ survey biennially and

developing annual maintenance plans at regional and department levels using 'inclusive' building and construction codes and standards

The Planning Unit will develop a database (i.e. list with GPS coordinates) with alternative 'safe' buildings that can be used for instruction purposes in each region to ensure continuity of teaching and learning in a safe manner. This will be done in collaboration with religious and other community groups to source additional spaces for students to be accommodated. It will be key that Ministers and Permanent Secretaries collaborate to develop cooperation agreements between the Departments of Education and Engineering/Public Works Department and build multi-sectoral partnerships (Ministry of Public Works) for flood control, e.g. erection of flood barriers/flood walls, especially around education facilities that are at high risk of floods.

Sub-programme 1.2: Digital infrastructure

Specific objective: Ensure equitable provision of digital infrastructure to vulnerable communities to support learning in times of crises

Justification and main challenges

The current digital infrastructure in Guyana faces several challenges. Energy and technological devices are not widely available and internet accessibility and connectivity is not widespread. These, along with the lack of alternative learning modalities, represent a major constraint that often jeopardize and hinder the provision of education causing loss of learning with consequent diminished learning outcomes and drop out among the most vulnerable students.

Sub-programme activities and key stakeholders

In order to avoid disruptions to teaching and learning the MoE as prioritized the following strategic actions to ensure that equitable provision of digital infrastructure is in place to support learning to vulnerable communities in times of crises:

1.2.1	Map and provide communication and ICT tools
1.2.2	Develop cooperation agreements with key governmental and private institutions
1.2.3	Provide radio sets to hinterland schools
1.2.4	Provide subsidies for the most vulnerable students from hinterland and riverine areas

The Management Information System Unit (MISU) will be tasked with conducting a school mapping of the communication tools available and functioning. The mapping will inform the provision or upgrading of communication and ICT tools for schools. In addition, the MISU will be in charge of developing cooperation agreements with key governmental and private institutions for the provision of internet and energy in remote and under-served areas.

The Regional Education Office will be responsible for the provision of radio sets to hinterland schools, where infrastructure is not sufficient. Subsidies will be provided for the most vulnerable students from hinterland and riverine areas for the purchase of data/internet devices under the coordination of the Management Information System Unit and Regional Education Departments.

Sub-programme 1.3: Access of girls and learners in vulnerable situations

Specific objective: Girls and children in vulnerable situations are ensured a continued access to education during and following a disaster

Justification and main challenges

The natural hazards described in the risk analysis chapter can have massive and disproportionate impact, especially on the most vulnerable learners, expanding the already existing inequities and making inclusivity a bigger challenge.

This paragraph outlines some of the main weaknesses that challenge the promotion of equity, inclusion and protection of all learners, especially the most vulnerable.

Nonetheless, the limited disaggregated data available does not give planners the full picture of the specific needs of the vulnerable learners. This means that the most vulnerable boys and girls will most likely not receive the attention and the specific support they need to stay in school and learn (physical, socio/economic and socio/emotional).

Addressing equity and inclusion issues is not an easy task, for example for learners with special needs, who become even more vulnerable when an emergency hits. They may also experience amplified risks in disaster situations because they are often left out from the planning process and are unprepared for emergencies.

Furthermore, the inadequate water and sanitation standards in all schools – with lack of clean drinking water, hand washing facilities and toilets – is one of the main causes of absenteeism, especially for girls. After an emergency, access to clean water and proper sanitation can become impossible pushing learners to drop out, especially female students. Additionally, inadequate WASH in schools, before and/or after an emergency, can also be one of the main causes of absenteeism for female teachers, in particular pregnant teachers.

When school feeding programs are not available or get interrupted, vulnerable students will be impacted more than others as they often rely on food distribution programmes to meet their basic need. Hence, their learning and development will be affected with short and long-term consequences.

The existing language of instruction policy is not inclusive since it does not sufficiently cater for language differences. Disparities are exacerbated for learners, including for indigenous populations and Venezuelan refugees and migrants whose first language is not English.

Sub-programme activities and key stakeholders

The following strategic actions aim at ensuring that girls and children in vulnerable situations have a continued access to education during and following a disaster:

1.3.1	Implement ad hoc programmes and awareness campaigns to prevent absenteeism and dropouts
1.3.2	Provide training for teachers/officers
1.3.3	Develop a detailed database of students with SEN
1.3.4	Incorporate indigenous and foreign languages into the school’s curriculum
1.3.5	Incorporate indigenous and foreign languages in the curriculum of Cyril Potter College of Education (CPCE)
1.3.6	Assess the need for teachers of foreign and indigenous languages
1.3.7	Recruit and train additional teachers to teach indigenous languages
1.3.8	Organize ad hoc back to school awareness campaigns

The implementation of ad hoc programmes and awareness campaigns to prevent absenteeism and dropouts will be the responsibility of the School Support/Welfare Unit. The campaigns will target the most vulnerable student girls and boys, based on the specific context and needs (i.e. menstrual hygiene programmes, meal package, importance of education campaign for parents, etc.). The Special Education Needs / Disability Unit will organize training sessions for teachers/officers in the detection of SEN students and referral; and develop a detailed database of students with SEN across regions.

The Principal of the Cyril Potter College will be tasked with the work of incorporating the indigenous languages and foreign languages in the curriculum of Cyril Potter College of Education (CPCE). The National Centre for Education Resource Development (NCERD) will be in charge of incorporating nine indigenous languages and foreign languages (Spanish, Portuguese) into the school’s curriculum, as well as assessing the need for and availability of teachers of foreign and indigenous languages. The Teaching Service Commission and the NCERD will be responsible of the recruitment and training of additional teachers to teach indigenous and foreign languages.

After a prolonged school closure due to an emergency situation, Assistant Chief Education Officers (ACEOs) will organize ad hoc back-to-school awareness campaigns and community mobilization activities for the continuity of education, with special attention to boys and girls at risk of dropping out.

5.1.2 Quality

Strategic objective: Improve teaching and learning processes and modalities in crises

Sub-programme 2.1: Teaching and learning materials and conditions

Specific objective: Teaching and learning materials are continuously available following an emergency, and teaching and learning conditions are safeguarded to ensure safe learning environment

Justification and main challenges

In Guyana, schools face several challenges when it comes to safeguarding from hazards; not only the teaching and learning materials, but the overall school environment. For instance, two main weaknesses severely impact the sector and the emergency response:

- i. Schools do not have hazard-resilient storage equipment for teaching and learning materials. Hence, when a natural hazard damages or destroys education facilities, it also damages or destroys the teaching and learning materials, leaving students and teachers without adequate materials. This will not be the only loss in terms of investment done, as it will disrupt the education activities and jeopardize learning.
- ii. Schools do not have a functional garbage disposal system, i.e. the lack of a sufficient number of bins and irregular garbage pick-ups lead to some education facilities, especially in hinterland areas, using pits behind the compound for burning. Non-functional WASH facilities and burning garbage can cause health issues, such as respiratory ailments and other diseases. The inappropriate and unsafe environment conditions cause higher absenteeism rates, especially for teacher and students with respiratory ailments, accentuating the existing inequities, especially for those who are more vulnerable.

Sub-programme activities and key stake holders

In order to ensure that teaching and learning materials are continuously available and teaching and learning conditions are safeguarded the following actions are prioritized:

2.1.1	Establish hazard-resilient and digitalized storage equipment and facilities
2.1.2	Procure and use hazard - resilient storage equipment and facilities
2.1.3	Store learning materials
2.1.4	Establish / implement existing emergency school procedures
2.1.5	Establish effective garbage disposal
2.1.6	Organize awareness raising sessions
2.1.7	Undertake fumigation and sanitisation of buildings

The Management Information System Unit and the NCERD will be leading on the establishment of hazard-resilient and digitalized (i.e. electronic repositories) storage equipment and facilities. Moreover, the Regional Education Department will be responsible of: i) procuring hazard-resilient storage equipment and facilities to ensure schools have improved record management and storage technology; ii) storing an adequate amount of printed learning materials to be prepared to avoid education disruption in case of an emergency.

Assistant Chief Education Officers establish/implement existing emergency school procedures for continuity of education, for instance, by re-adapting building infrastructure and adopting alternative schedules' arrangements to guarantee continuity (e.g. rotating shift).

Regional Education Departments will be in charge of: i) establishing an effective garbage disposal at school level and ii) undertaking fumigation and sanitization of buildings after a disaster. The school Support Unit – School Health Coordinator will organize awareness-raising sessions on proper waste disposal and risks of disease outbreak on a regular basis.

Sub-programme 2.2: Teachers
Specific objective: Teachers are trained on adapted pedagogical approaches

Justification and main challenges

While teachers are the backbone of the system, in Guyana there is a shortage in teachers and volunteer teachers who also lack adequate skills and abilities.

When a crisis hits, some teachers, who are not from the catchment of the schools, may return home, causing interruption of learning sessions if there are not enough teachers available for replacement. The lack of a roster of teachers who could be rapidly deployed makes things more challenging.

All teachers, including volunteer teachers, lack adequate training to deliver educational content online and/or with other modalities. Hence, the quality of remote learning becomes weaker when an emergency hits as teachers are unfamiliar with the use of alternative teaching methods and lack awareness of the risks and potential impacts of disasters.

Sub-programme activities and key stakeholders

The strategic actions aiming at building a teaching workforce that is trained on adapted pedagogical approaches are:

- 2.2.1 Provide capacity building in ICT and alternative education methodologies
- 2.2.2 Promote a career in teaching

2.2.3 Create a roster of teachers

2.2.4 Develop education in emergency and disaster prevention modules

The NCERD will be responsible of providing continuous capacity building in ICT and alternative education methodologies to equip teachers with the needed skills to continue teaching.

The Welfare Unit will be promoting a career in teaching through awareness campaigns with the local community and job fairs to attract more people to become teachers.

The Regional Education Departments will be tasked of creating a roster of teachers, substitute and volunteer teachers, who can be rapidly deployed in case of an emergency.

The CPCE and the NCERD will collaborate to develop education in emergency and disaster prevention modules to be implemented during teachers' initial training and continuous training.

Sub-programme 2.3: Psychosocial needs

Specific objective: Education personnel and teachers are systematically trained to provide emotional and mental wellbeing support to students

Justification and main challenges

Following a disaster, both learners and teachers can experience various forms of psycho/social distress that require resources and skills to be addressed in a timely and adequate manner. The lack of welfare officers and the limited skills of the Welfare and Guidance and Counselling officers in identifying learners that require protection services and referral to specialized services and addressing the psychosocial needs of both teachers and learners can make the distress more acute and the effects worsened by long-term isolation and limited social contacts.

This might push students to drop out and never return to school. Numerous studies show that children who are out of school are more vulnerable and exposed to child protection and economic exploitation risks, including violence, sexual exploitation and child labour.

Each school should appoint competent officers responsible for promoting a protective school environment, especially for the most vulnerable, that is supportive and inclusive.

Sub-programme activities and key stakeholders

Hence, ensuring that educational personnel and teachers are systematically trained to provide emotional and mental wellbeing support to students can be done through the following actions:

2.3.1	Establish and disseminate PSS hotline numbers
2.3.2	Revise the Health and Family Life Education Curriculum
2.3.3	Assess the needs for welfare officers
2.3.4	Train welfare officers on PSS
2.3.5	Offer training and refresher courses to Child Protection Officers, Welfare Officers, Probation Officers

The Welfare Unit will be leading the establishment of the psychosocial support hotline/referral numbers to provide students with the needed support to be resilient and have coping mechanism to handle adversities. Once established, the Regional Education Officer will disseminate the PSS (hotline/referral) numbers at school and community levels by implementing awareness-raising campaigns and distributing informational brochures so that referral pathways are known and clear to all students.

The School Support Unit will revise the content and strategies of the HFLE curriculum to ensure that it is more responsive to the needs of the renewed curriculum framework.

The Welfare Unit together with Human Resource Management will assess the needs for welfare officers across the country and plan for the needed recruitments to ensure each school has at least one welfare officer. Once recruited, the Welfare Unit will organize trainings on PSS for the new welfare officers. The Chief School Welfare Officer and the Director of Social Services will coordinate the implementation of trainings and refresher courses for Child Protection Officers, Welfare Officers and Probation Officers so that they can effectively provide PSS in crisis situations.

The strategic actions put in place to ensure education continuity in a safe learning environment go hand in hand with the above-mentioned actions as they all aim at helping students regaining a sense of normalcy and emotional and physical protection in the aftermath of disasters.

Sub-programme 2.4: Loss of learning

Specific objective: Alternative curriculum and assessment are developed to take into account and fill the learning gap following an emergency

Justification and main challenges

After a disaster, it is essential to guide schools to continue/resume teaching and learning to minimize the loss of learning. This can be harder if, for instance, there is not i) a flexible school calendar, ii) a system for grading or monitoring learners remotely; iii) alternative education programmes that help children to recuperate the delays or loss of instructional

time such as catch-up classes and accelerated learning programmes; iv) sufficient school absorption capacity.

When the above-mentioned key elements and conditions are not in place, it is difficult to effectively supervise the work completed by learners at a distance, recuperate the delays or loss of instructional time. Without ad hoc supportive contextualized measures and holistic programmes that maintain learner’s attention and motivation, it will be hard to prevent learners from dropping out.

Sub-programme activities and key stakeholders

In order to have an alternative curriculum and assessment developed to fill the learning gap following an emergency, the following actions are needed:

2.4.1	Define distance learning assessment methods
2.4.2	Develop a consolidated curriculum and remedial materials
2.4.3	Advocate for flexible learning hours and calendar
2.4.4	Assess students’ needs
2.4.5	Implement remediation classes and alternative education
2.4.6	Implement distance learning

The NCERD together with the CPCE will coordinate the definition and development of distance learning assessment methods to assess the education needs of the affected school-age population.

Moreover, the NCERD will be in charge of the development of a consolidated curriculum and remedial materials for all grades, which would include a collection of worksheets that matches the current curriculum and that could be easily retrieved and printed for distribution.

The CEO will also advocate for flexible learning hours and calendar, for example, by suggesting the provision for instruction during regular vacation time, or extended school.

The NCERD will be tasked with assessing students’ individual learning needs for remediation after an emergency. The Education System Committee (ESC) will then ensure the implementation of remediation classes and alternative education for students in need of specific learning support.

Finally, both the NCERD and the CPCE will ensure that distance learning is adopted and implemented – when needed – following a disaster.

5.1.3 Management

Strategic objective: Improve capacities for managing crises

Sub-programme 3.1: Planning for Risk Management

Specific objective: Education Officers and school heads and deputies are trained to develop, implement and monitor risk responsive strategies in their sphere of operations

Justification and main challenges

The disaster risk management planning in place both at REDO and the school level is inadequate, making REDO officials as well as school-level officials unprepared to respond or implement prevention measures. This may create further delays in the emergency response. Strengthening the knowledge, awareness and capacities at REDO and the school level engaging a plethora of key actors, including students and parents, is essential to ensure the whole school family is actively involved in all steps of the risk management process.

Sub-programme activities and key stakeholders

The following actions will ensure that education officers, school heads and deputies are trained to develop, implement and monitor risk responsive strategies:

3.1.1	Train REDOs in risk management planning and implementation
3.1.2	Develop risk management strategies at REDOs level
3.1.3	Train school heads and deputies in risk management planning and implementation
3.1.4	Establish and train risk management committees at the school level
3.1.5	Develop school-level risk management strategies
3.1.6	Support the existing early warning system

The Planning Unit will be responsible of training REDOs in risk management planning and implementation and develop risk management strategies at the REDOs level.

The Regional Education Officers will organize training sessions for school heads and deputies in risk management planning and implementation. They will also coordinate the establishment and training of risk management committees (RMCs) at school level. Each school will have an RMC composed of trained head teachers, teachers, parents and students' representatives, responsible for the promotion of the school safety. RMCs will be tasked with developing risk management plans, carrying out simulation and emergency drills, and identifying safe evacuation routes, for example.

The Regional Education Officers and DEOs will be tasked with the development of school-level risk management strategies, which will include response activities and procedures.

The Regional Democratic Councils will support the existing early warning system and its wide network to ensure the school family and relative communities can act in a timely and appropriate manner if threatened by hazards reducing the possibility of personal injury, loss of life and damage to education buildings.

Sub-programme 3.2: Communication and coordination
 Specific objective: Risk coordination and communication strategies are developed and functioning to withstand natural and other hazards at regional and school levels and ensure access to and continuity of quality education

Justification and main challenges

Communication is at the heart of a functioning disaster risk management cycle. The communication can become more difficult and not timely when there are no focal points or specific units tasked with risk management at REDO or central levels. Moreover, it can be made more complicated by the remoteness of some regions and limited access to digital energy and technology.

Emergency responses may be delayed and not contextualized due to the lack of timely information and regular communication among key stakeholders.

Furthermore, the supervision activities are often interrupted because the already remote areas become inaccessible or because the supervisors are often impacted by the emergency as well. Virtual supervision visits and communication are not a viable alternative yet.

The limited communication is also a challenge that can hinder or limit the support mechanisms provided to parents, the collaboration between school management and PTAs and other community-based and statutory activities.

Sub-programme activities and key stakeholders

In order to develop and have functional risk coordination and communication strategies to withstand natural and other hazards both at regional and school levels the following actions need to be implemented:

3.2.1	Appoint risk management focal points
3.2.2	Establish a network of risk management focal points
3.2.3	Mapping of the communication tools in education offices
3.2.4	Establish contracts with internet service providers
3.2.5	Provide radio sets to REDOs
3.2.6	Develop a plan on distance supervision
3.2.7	Train education officers to deliver distance supervision

3.2.8	Establish/update communication procedures
3.2.9	Develop a database with key contact details and GPS coordinates
3.2.10	Review the policy of engagement for PTAs

DCEO (A)/Regional Education Officers will appoint risk management focal points in every education department to coordinate, plan, budget and support risk management processes within the region creating a network of risk management focal points at department and central levels.

Education departments (Regional Education Officers) will conduct a mapping of the communication tools available and already functioning in education offices and budget, procure and, (as described in the ACCESS programme 1.2.1 above), provide communication tools for schools and education offices.

The MISU will establish contracts with internet service providers to ensure access to e-gov sites countrywide, including in remote areas.

The Regional Education Departments will be responsible for the provision of radio sets to REDOs where infrastructure is not sufficient, to facilitate smooth communication.

ACEOs and Regional Education Officers will work in synergy to develop a plan on distance supervision to be adopted when schools become inaccessible.

The NCERD will organize trainings for the education officers to equip them with necessary skills to do distance supervision.

The School Support Unit in collaboration with the PTA Coordinator will be in charge of: i) operationalizing the strategic communication plan with parents in all educational institutions so that it can be adopted in case of emergency, and family phone trees can consequently be implemented; and ii) reviewing the policy of engagement for PTAs to ensure community members participate actively, transparently and without discrimination in analysis, planning, design, implementation, monitoring, and evaluation of education responses.

The Planning Unit will be involved in the development of a functional database with parents/guardians' contacts and GPS coordinates to ensure continued communication with families.

Sub-programme 3.3: Data management and use
 Specific objective: Risk management data and information systems are integrated into existing data systems and instituted at central, regional and school levels, to support

Justification and main challenges

The current data management system does not seem strong enough to enable the tracking of learners who drop out from school. The remoteness of crisis-affected areas can make data collection more challenging. Indeed, emergencies can worsen the current situation by disrupting the data collection, especially at the school level, creating bigger gaps. Moreover, the information management systems can struggle further to analyse evolving needs and to highlight disparities in education across regions and population.

Sub-programme activities and key stakeholders

The following strategic actions aim at integrating risk management data and information systems into existing data systems and instituted at central, regional and school levels, to support reporting and monitoring during and after crises:

3.3.1	Mainstream risk-related and vulnerability questions and indicators into the EMIS
3.3.2	Develop data collection tools as part of the EMIS
3.3.3	Train on data collection and analysis
3.3.4	Conduct survey on out of school students
3.3.5	Produce a study on migrant and vulnerable students

The Planning Unit of the MOE will be responsible for mainstreaming risk-related and vulnerability questions and indicators into the EMIS to capture data on risks, dropouts and absenteeism; developing on and off-line data collection tools as part of the EMIS in development; and training central and regional level education officers on data collection and analysis to have a better understanding of the existing disparities, vulnerabilities and specific needs of learners. The development of data collection tools to assess risks to the education sector will be part of the overall upgrading of EMIS, currently being implemented by the MoE of Guyana, in collaboration with UNESCO.

In addition, the Planning Unit of the MoE will be responsible for conducting survey on out of school students biennially and producing a study on migrant and vulnerable students.

Sub-programme 3.4: Budget and Finance

Specific objective: Financial management processes and budget established and provided at all levels to support emergency/risk response and prevention measures

Justification and main challenges

Currently, the Ministry of Education budget has neither specific funds allocated for emergencies nor an insurance policy. The contingency budget line is not sufficient to cover the emergency-related costs. The MoE needs to find resources to cover the costs caused by hazard damages. Relying on external support from donors or private entities can increase delays in emergency repairs and reconstructions.

Sub-programme activities and key stakeholders

The following actions aim at establishing financial management processes and providing budget at all levels to support emergency/risk response and prevention measures:

3.4.1	Develop an agreement of cooperation between Ministry of Education and Ministry of Finance
3.4.2	Establish a national Disaster Preparedness/Relief Fund
3.4.3	Procurement of an insurance policy

The Ministers of Education and Finance will be in charge of developing an agreement of cooperation to include contingency budget lines at the regional and central levels in order to establish a National Disaster Fund for the education sector to cater for unforeseen events and other risks. The contingency fund is triggered in the event of disasters leading to “urgent and unavoidable and unforeseen need for expenditure”, as stipulated by the Financial Management Act of 2003 (FMAA).⁶ The MoE will subsequently need to ensure the sufficient allocation of funding to the education sector from the National Disaster Fund.

Ministers of education and finance, together with the Permanent Secretary, will lead the procurement of an insurance policy for the education sector.

5.2 Logical framework: proposed strategic areas of action by the MoE

⁶ <http://goinvest.gov.gy/wp-content/uploads/Cap.-73.02-Fiscal-Management-Actfull-permission.pdf>

Strategic objectives/ Programmes	Strategic areas of action	Desired Outputs	Actors in charge of implementation/ Required partnerships	Estimated Cost (G\$'000)	Funds available (G\$'000)
Strategic objective 1: Ensure equitable access to education and a safe and protective learning environment to all children and youth affected by crises					
Key outcome: Improving access to and the efficiency of the education system and reducing inequities in education					
Sub - programme 1.1: Education facilities					
Specific objective: Education buildings and facilities are maintained and resilient to hazards					
1. 1.1	Update and harmonize school building and school construction codes	School building and school construction codes updated and harmonized to include risks by 2023	Building/Special Project Unit – Ministry of Education/Regional Civil Works Department	5 000	
1. 1.2	Undertake regular school maintenance based on assessments/monitoring reports	All schools received a maintenance assessment in accordance with codes and standards from the civil works department every two years	Building/Special Project Unit – Ministry of Education/Regional Civil Works Department	70 000	
1. 1.3	Undertake timely rehabilitation of damaged school facilities as per 'inclusive' building codes and standards	All education buildings maintained and renovated in accordance with codes and standards by 2025	Building/Special Project Unit – Ministry of Education/Regional Civil Works Department	10 000 000	
1. 1.4	Monitor the status of the education facilities (regular, maintenance and damaged facilities under rehab) as per 'inclusive' building and construction codes and standards and by implementing the conditions' survey biennially	All education buildings and facilities monitored on a regular basis to ensure that they meet the minimum standards (building and construction codes and standards)	Building/Special Project Unit – Ministry of Education/Regional Civil Works Department	10 000 000	
1. 1.5	Develop annual maintenance plans at regional and department level	Regional and Department-level annual maintenance plans developed	Building/Special Project Unit – Ministry of Education/Regional Civil Works Department	20 000	
1. 1.6	Develop of a database (i.e. list with GPS coordinates) with alternative 'safe' buildings that can be used for instruction purposes in each region	All regions have identified alternative 'safe' buildings that can be used for instruction by 2025	Planning Unit	10 750	
1. 1.7	Develop cooperation agreements between the Departments of Education and Engineering/Public Works Department	Cooperation agreements between MoE and Engineering/Public Works Department established	Ministers and Permanent Secretaries	0	
1. 1.8	Establish and build multisectoral partnerships (Ministry of Public Works) for flood control e.g. Erection of Flood barriers/ flood walls especially around schools that are at high risk of floods likely to be triggered by overtapping or breach in Sea Defence.	Multisectoral partnerships established with Ministry of Public Works	Ministers and Permanent Secretaries	0	
				20 105 750	0
Sub - programme 1.2: Digital infrastructure					
Specific objective: Ensure equitable provision of digital infrastructure to vulnerable communities are in place to support learning in times of crises					
1.2.1	Map and provide/upgrade of communication and ICT tools for schools	Mapping and provision of communication and ICT tools to schools completed by mid-2022	MISU	2 481 750	174 000
1.2.2	Develop of cooperation agreements with key Governmental and private institutions for the provision of internet and energy in remote/under-served areas	Cooperation agreements with key Governmental and private institutions developed by 2025	MISU	915 000	
1.2.3	Provide radio sets to Hinterland schools where infrastructure is not sufficient	All Hinterland schools are equipped with radio sets by 2025	Regional Education Office	20 000	
1.2.4	Provide subsidies for the most vulnerable students from Hinterland and Riverine areas for the purchase of data/ internet/ devices	IT subsidies provided to the most vulnerable students from Hinterland and Riverine areas	Management Information System Unit and Regional Education Departments	15 084 355	
				18 501 105	174 000

Sub - programme 1.3: Access of girls and children in vulnerable situations					
Specific objective: Girls and children in vulnerable situations are ensured a continued access to education during and following a disaster					
1.3.1	Implement ad hoc programmes and awareness campaigns to prevent absenteeism and drop outs of the most vulnerable student girls and boys (i.e. menstrual hygiene programmes, meal package, etc.)	All schools have organised awareness campaigns to prevent absenteeism by 2025 and parents have been reached with awareness campaigns about the importance of education for their children	School Support/Welfare Unit	20 000	
1.3.2	Provide training for teachers/ Officers in the detection of SEN students and referral	All teachers/officers are trained to cater the needs of students with SEN by 2025	Special Education Needs/ Disability Unit	20 000	
1.3.3	Develop a detailed database of students with SEN across regions	A detailed database of students with SEN across regions has been developed by 2023	Special Education Needs/ Disability Unit	10 000	
1.3.4	Incorporate indigenous languages (9) and foreign languages (Spanish, Portuguese) into the school's curriculum	Curriculum at all levels caters for indigenous and foreign languages by 2023	NCERD	160 000	
1.3.5	Incorporate indigenous languages (9) and foreign languages (Spanish, Portuguese) in the curriculum of Cyril Potter College of Education (CPCE)	Curriculum at the CPCE caters for indigenous and foreign languages by 2023	Principal of Cyril Potter College	60 000	
1.3.6	Assess the need for and availability of teachers of foreign and indigenous languages	Assessment of integration of indigenous and foreign languages into education system conducted by 2022	NCERD	70 000	
1.3.7	Recruit and train additional teachers to teach indigenous and foreign languages	Indigenous and foreign language teachers trained and in place based on assessed needs by 2023	Teaching Service Commission/NCERD	83 200	83 200
1.3.8	Organize ad hoc back to school awareness campaigns and community mobilization activities for the continuity of education	100% of schools at all levels have organized back-to-school awareness campaigns	ACEOs	150 000	
				573 200	83 200
Sub-total ACCESS programme				39 180 055	257 200
Strategic objective 2 : Improve teaching and learning processes and modalities in crises					
Key outcome: Improving performance and psychosocial support at all levels					
Sub - programme 2.1 : Teaching and learning materials and conditions					
Specific objective: Teaching and learning materials are continuously available following an emergency, and teaching and learning conditions are safeguarded to ensure safe learning environment					
2.1.1	Establish hazard resilient and upgraded (i.e. electronic repositories) storage equipments and facilities	100% of schools have set up hazard resilient digitalized storage equipment by 2025	Management Information System Unit/NCERD	368 000	
2.1.2	Procure and use hazard resilient storage equipment and facilities	100% of schools have improved record management and utilized improved storage technology by 2023	Regional Education Department	20 000	
2.1.3	Store adequate amount of printed learning materials	100% of schools have systematically stored printed learning materials in case of an emergency	Regional Education Department	60 000	
2.1.4	Establish / implement existing emergency school procedures for continuity of education	Emergency school procedures developed and made available to support learning continuity	Assistant Chief Education Officers	5 000	
2.1.5	Establish an effective garbage disposal at school level	All schools have effective garbage disposal system by 2023	Regional Education Departments	180 000	
2.1.6	Organize awareness raising sessions on proper waste disposal and risks of disease outbreak	Prevention sessions on proper waste disposal the risk of disease outbreak are conducted on a regular basis	School Support Unit/ School Health Coordinator	45 000	
2.1.7	Undertake fumigation and sanitisation of buildings after a disaster	Fumigation and sanitisation of buildings have been undertaken after each disaster	Regional Education Departments	5 000 000	
				5 678 000	0

Sub - programme 2.2 : Teachers					
Specific objective: Teachers are trained on adapted pedagogical approaches					
2.2.1	Provide continuous capacity building in ICT and alternative education methodologies	100% of teachers have received lct and alternative education methodologies training by 2025	NCERD	875 680	875 680
2.2.2	Promote a career in teaching with local community and in job fairs	Career guidance campaigns carried out annually by 2025	Welfare Unit	70 000	
2.2.3	Create a roster of teachers for rapid deployment in case of emergency	An effective roster of substitute/volunteer teachers is developed and functioning by 2023	Regional Education Departments	200 000	
2.2.4	Develop education in emergency and disaster prevention modules to be implemented during teachers' initial training and continuous training	Education in Emergency and disaster prevention modules designed and included in teachers' pre- and in-training	CPCE/NCERD	80 000	
				1 225 680	875 680
Sub - programme 2.3 : Psychosocial needs					
Specific objective: Education personnel and teachers are systematically trained to provide emotional and mental wellbeing support to students					
2.3.1	Establish and disseminate PSS hotline/referral numbers	Students are safe and are able to build resilience and positive coping mechanisms in the face of adversity PSS referral pathways information available in each school to all students	Welfare Unit/ Regional Education Officer	0	
2.3.2	Revise the content and strategies of the Health and Family Life Education Curriculum	Strategies of the Health and Family Life Education Curriculum revised and operationalized by 2022	School Support Unit -HFLE	24 000	24 000
2.3.3	Assess the needs for welfare officers across the country and plan for the recruitment of additional welfare officers	Each school has a minimum of 1 welfare officer appointed in each school by 2025	Welfare Unit/Human Resource Management	20 000	
2.3.4	Train welfare officers on PSS	100% of welfare officers are trained to provide psychosocial support	Welfare Unit	50 000	
2.3.5	Offer PSS training and refresher courses to Child protection Officers, Welfare Officers, Probation Officers	100% of Child protection, welfare and probation officers	Chief School Welfare Officer/Director of Social Services	20 000	
				114 000	24 000
Sub - programme 2.4: Loss of learning					
Specific objective: Alternative curriculum and assessment are developed to take into account and fill the learning gap following an emergency					
2.4.1	Define distance learning assessment methods	Alternative distance learning assessment methods are developed and effective to assess the education needs of affected population	NCERD/CPCE	66 000	
2.4.2	Develop a consolidated curriculum and remedial materials which would include a collection of worksheets that matches the current curriculum that can be easily retrieved/accessed and printed for distribution	Consolidated curriculum developed and distributed to all grades, including to vulnerable students by 2023	NCERD	135 000	135 000
2.4.3	Advocate for flexible learning hours and calendar; suggesting provision for instruction during regular vacation time, or extended school days	Flexible timeframe and calendars adopted	CEO	0	
2.4.4	Assess students needs for remediation after the emergency	All students are assessed after an emergency to evaluate the individual learning needs	NCERD	60 000	
2.4.5	Implement remediation classes and alternative education for vulnerable students	Remediation classes and alternative education effective	Education System Committee (ESC)	40 000	
2.4.6	Implement distance learning	Distance learning classes implemented following a disaster	NCERD/CPCE	100 000	
				401 000	135 000
				7 418 680	1 034 680
Sub-total QUALITY				7 418 680	1 034 680

Strategic objective 3 :Improve capacities for managing crises					
Key outcome indicators: Improving governance and accountability					
Sub - programme 3.1: Planning for risk management					
Specific objective: Education Officers and school heads and deputies are trained to develop, implement and monitor risk responsive strategies in their sphere of operations					
3.1.1	Train REDOs in risk management planning and implementation	100% of REDOs trained in risk management by 2025	Planning Unit	15 000	
3.1.2	Develop risk management strategies at REDOs level	Risk management strategies developed and effective by 2025	Planning Unit	20 000	
3.1.3	Train school heads and deputies in risk management planning and implementation	100% of current school heads and deputies at all levels trained in risk management by 2025	Regional Education Officers	55 000	
3.1.4	Establish and train risk management committees at school level (i.e.risk-management plans, emergency drills) including for students with special needs	Risk management committees established at school-level by 2022	Regional Education Officers	35 000	
3.1.5	Develop school-level risk management strategies which include response activities	Risk management strategies developed at school-level by 2025	Regional Education Officers/DEOs	0	
3.1.6	Support the existing early warning system	The Early Warning System is operationalized (to empower individuals and communities threatened by hazards to act in sufficient time and in an appropriate manner to reduce	Regional Democratic Councils	0	
				125 000	0
Sub - programme 3.2: Communication and coordination					
Specific objective: Risk coordination and communication strategies are developed and functioning to withstand natural and other hazards at regional and school levels and ensure access to and continuity of quality education					
3.2.1	Appoint risk management focal points in every education department and at central level	Risk management focal points recruited and appointed by 2022	DCEO (A)/Regional Education Officers	0	
3.2.2	Establish a network of risk management focal points at department and central levels	Effective network of risk management focal points established at department and central levels	DCEO (A)/Regional Education Officers	5 000	
3.2.3	Education departments conduct a mapping of the communication tools available and already functioning in education offices and budget, procure and provide communication tools for schools and education offices	Mapping of communication tools in education offices completed by mid-2022/ Communication tools procured and distributed to all schools by 2025	Regional Education Officers	900 000	
3.2.4	Establish contracts with internet service providers	Strengthen and increase access to e-gov sites in remote areas by 2025	MISU	100 000	
3.2.5	Provide radio sets to REDOs where infrastructure is not sufficient	All REDOs are equipped with radio sets by 2025	Regional Education Departments	440	
3.2.6	Develop a plan on distance supervision when schools are inaccessible	Distance supervision plan developed	ACEOs/Regional Education Officers	0	
3.2.7	Train education officers to deliver distance supervision	100% of education officers trained to deliver distance supervision by 2023	NCERD	15 000	
3.2.8	Establish/update procedures of communication with parents in case of emergency	Strategic communication plan with parents developed and operationalized in all educational institutions by 2022	School Support Unit/PTA Coordinator	0	
3.2.9	Develop a database with parents/guardians' contacts and GPS coordinates	Continued communication with parents is ensured thanks to functional database	Planning Unit	100 000	
3.2.10	Review the policy of engagement for PTAs	Policy of engagement for PTAs reviewed and disseminated (Community members participate actively, transparently and without discrimination in analysis, planning, design, implementation, monitoring, and evaluation of education responses)	School Support Unit – PTA Coordinator	0	
				1 120 440	0

Sub - programme 3.3: Data management and use					
Specific objective: Risk Management data and Information systems are integrated into existing data systems and instituted at central, regional and school levels, to support reporting and monitoring during and after crises					
3.3.1	Mainstream risk-related and vulnerability questions and indicators into the EMIS	Integrated Education Management Information System instituted in the sector that captures data on risk, dropouts, and absenteeism by 2005	Planning Unit	0	
3.3.2	Develop on and off-line data collection tools as part of the EMIS in development	Data collection tools are available and used	Planning Unit	0	0
3.3.3	Train on data collection and analysis to understanding disparities for central and regional level education officers	Data collected on risks by region disaggregated to the most granular level (gender, disability, etc.)	Planning Unit	25 000	
3.3.4	Conduct survey on out-of-school students biennially	Results of the out-of-school student survey available in 2000, 2001	Planning Unit	15 500	
3.3.5	Produce a study on migrant and vulnerable students	Study on migrant and vulnerable students available	Planning Unit	15 700	15 700
				56 200	15 700
Programme 3.4: Budget and finance					
Specific objective: Financial Management processes and budget established and provided at all levels to support emergency/risk response and prevention measures					
3.4.1	Develop an agreement of cooperation between MoE and MoF to include contingency budget lines	Contingency budget lines included in central and regional budgets as per agreement of cooperation	Ministers of Education and Finance	0	
3.4.2	Ensure allocation of funding to the education sector from the National Disaster Fund	A national Disaster Fund available to the education sector, including for prevention and preparedness	Minister of Education	0	
3.4.3	Procurement of an insurance policy	Insurance policy for the MoE procured	Ministers (MOE & MOF) and Permanent Secretary	0	
				0	0
Sub-total MANAGEMENT				1 301 640	15 700

5.3 Costing and financing for the implementation of the strategy

The total cost of the strategy is estimated to amount to 47.9 billion Guyanese Dollars, as shown in the table below. The estimated costs per programme are as follows: for Programme 1 (Access), the cost is estimated at 39.2 billion Guyanese Dollars; for Programme 2 (Quality), the estimated costs amount to 7.4 billion Guyanese Dollars, and for Programme 3 (Management), the costs are estimated to be 1.3 billion Guyanese Dollars.

The calculation of these costs has been estimated by the MoE based on current market prices and unit costs for the provision of goods and services in the education sector. Consultations were conducted with relevant officials to verify costs.

Funding for several of the strategic actions included in this strategy has already been mobilized from the Inter-American Development Bank (IDB), the Caribbean Development Bank (CDB) and the Global Partnership for Education (GPE). Funding available for the National Risk Management Policy amounts to 1.3 billion Guyanese Dollars.

Within Programme 1 (Access), teacher training for the coming two years will be entirely funded by the IDB, amounting to 83.2 million Guyanese Dollars. In addition, the MoE has secured funding of 174 million Guyanese Dollars from GPE to upgrade ICT in secondary schools and progressively to all levels of the education system.

For Programme 2 (Quality), the MoE has secured funding of 876 million Guyanese dollars through the GPE grant, which will cover the training in ICT and alternative education methods of approximately 5,000 teachers. The revision of the content and strategies of the HFLE curriculum to ensure that it is more responsive to the needs of the renewed curriculum framework will be funded by the CDB amounting to 24 million Guyanese Dollars. Furthermore, the cost of the development of the consolidated curriculum will be covered by the MoE itself, while the printing costs until the end of 2023 will be covered by IDB amounting to 135 million Guyanese Dollars. Printing costs from 2024 onwards will need to be covered by the MoE.

Finally, for Programme 3 (Management), 15.7 million dollars have been mobilized from IDB to cover the costs of developing a study on migrants and vulnerable students.

There is currently a funding gap of 46.6 billion Guyanese Dollars for the plan's implementation period. The funding gap for the remaining activities will be mobilized by the MoE in collaboration with the MoF and other development partners.

Strategic areas of action	Estimated Cost (G\$'000)	Funds available (G\$'000)
Strategic objective 1: Ensure equitable access to education and a safe and protective learning environment to all children and youth affected by crises		
Sub - programme 1.1: Education facilities		
Sub-total 1.1	20 105 750	0
Sub - programme 1.2: Digital infrastructures		
Sub-total 1.2	18 501 105	174 000
Sub - programme 1.3: Access of girls and children in vulnerable situations		
Sub-total 1.3	573 200	83 200
Sub-total ACCESS	39 180 055	257 200
Strategic objective 2 : Improve teaching and learning processes and modalities in crises		
Sub - programme 2.1 : Teaching and learning materials and conditions		
Sub-total 2.1	5 678 000	0
Sub - programme 2.2 : Teachers		
Sub-total 2.2	1 225 680	875 680
Sub - programme 2.3 : Psychosocial needs		
Sub-total 2.3	114 000	24 000
Sub - programme 2.4: Loss of learning		
Sub-total 2.4	401 000	135 000
Sub-total QUALITY	7 418 680	1 034 680
Strategic objective 3 :Improve capacities for managing crises		
Sub - programme 3.1: Planning for risk management		
Sub-total 3.1	125 000	0
Sub - programme 3.2: Communication and coordination		
Sub-total 3.2	1 120 440	0
Sub - programme 3.3: Data management and use		
Sub-total 3.3	56 200	15 700
Sub - Programme 3.4: Budget and finance		
Sub-total 3.4	0	0
Sub-total MANAGEMENT	1 301 640	15 700

	Total estimated costs	Funding available	Funding gap
Grand Total - Programme 1 Access (G\$'000)	39 180 055	257 200	38 922 855
Grand Total - Programme 2 Quality (G\$'000)	7 418 680	1 034 680	6 384 000
Grand Total - Programme 3 Management (G\$'000)	1 301 640	15 700	1 285 940
Guyana National Risk Management Policy - Grand Total (G\$'000)	47 900 375	1 307 580	46 592 795

5.4 Implementation and monitoring

As described above the MoE will ensure all key departments and staff at all levels will support the implementation of this strategy. Regular monitoring is key for timely review and revision of the strategy and progress towards the indicators for each programme area will be managed by the Planning Unit. The logical framework below provides an overview of the proposed strategy and the indicators therein will be monitored on an annual basis, in conjunction with the monitoring of the ESP.

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UNDP. 2013. Disaster Risk Management Policy Guyana. [http://cdc.gy/wp-](http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/8.%20Disaster%20Risk%20Management%20Policy.pdf)

[content/uploads/2016/05/Document-for-Website/8.%20Disaster%20Risk%20Management%20Policy.pdf](http://cdc.gy/wp-content/uploads/2016/05/Document-for-Website/8.%20Disaster%20Risk%20Management%20Policy.pdf)

Annexes

Annex 1 Regional risk profiles

REGION RISK PROFILE

Name of the region: REGION 7 (Georgetown)																															
Hazard	Triggers	Probability of impact on education sector (high/medium/low)	Frequency (annually/twice a year/episodically/etc....)				Specific location/ township																								
			Months and intensity (high/medium/low)																												
Floods	Wet monsoon from June to October	High because most schools are in flood-prone areas	Frequency: Annually Months and intensity: <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>L</td> <td>L</td> <td>M</td> <td>H</td> <td>H</td> </tr> </tbody> </table>				Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	H	H	Jul	Aug	Sep	Oct	Nov	Dec	H	L	L	M	H	H	Georgetown
Jan	Feb	Mar	Apr	May	Jun																										
L	L	L	L	H	H																										
Jul	Aug	Sep	Oct	Nov	Dec																										
H	L	L	M	H	H																										
Noise Pollution	Vehicle horns and music, mobile music cards, businesses in close proximity to schools	Medium because only schools in busy/business areas or close to the roads are mainly affected	Frequency: Daily Months and intensity: <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>H</td> <td>M</td> <td>L</td> <td>M</td> <td>M</td> </tr> </tbody> </table> <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> <td>H</td> </tr> </tbody> </table>				Jan	Feb	Mar	Apr	May	Jun	M	H	M	L	M	M	Jul	Aug	Sep	Oct	Nov	Dec	L	L	M	M	M	H	Georgetown
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M	H	M	L	M	M																										
Jul	Aug	Sep	Oct	Nov	Dec																										
L	L	M	M	M	H																										

<p>Substance abuse</p>	<p>Peer pressure Lack of family support Drug yards in communities Bars selling to under aged children Poverty</p>	<p>Low because even though serious in nature a small percentage of students are affected based on reported cases</p>	<p>Frequency: Episodically Months and intensity:</p> <table border="1" data-bbox="992 300 1503 376"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>L</td> <td>M</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> </tr> </table> <table border="1" data-bbox="992 411 1503 488"> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>M</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	M	L	M	M	M	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	L	L	M	<p>Georgetown</p>
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L	M	L	M	M	M																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	L	L	M																							
<p>Prison/unrest</p>	<p>Prison breaks Protest of socioeconomic, social and political issues</p>	<p>Generally low since it is situational and unpredictable but students are affected</p>	<p>Frequency: Episodically Months and intensity:</p> <table border="1" data-bbox="992 699 1503 775"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>L</td> <td>L</td> </tr> </table> <table border="1" data-bbox="992 810 1503 887"> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>L</td> <td>M</td> <td>M</td> <td>L</td> <td>L</td> <td>L</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	M	M	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	M	M	L	L	L	<p>Georgetown</p>
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L	M	M	L	L	L																							
<p>Gaming centres and sports bars activities</p>	<p>Peer pressure Lack of family support Businesses more concerned with making money rather than with under aged children frequenting their businesses</p>	<p>Medium because many students frequent these businesses before, during and after school.</p>	<p>Frequency: Daily Months and intensity:</p> <table border="1" data-bbox="992 1018 1503 1094"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>L</td> <td>M</td> <td>L</td> <td>M</td> <td>L</td> <td>M</td> </tr> </table> <table border="1" data-bbox="992 1129 1503 1206"> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>M</td> <td>M</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	M	L	M	L	M	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	L	M	M	<p>Georgetown</p>
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L	M	L	M	L	M																							
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L	L	L	L	M	M																							

Safe space for recreational and physical education activities	Layout of compound Small compounds Unleveled compounds	Medium because many school do not have the space or facilities for these activities.	<p>Frequency: Termly</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 300 1503 375"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>M</td> <td>M</td> <td>M</td> <td>L</td> <td>M</td> <td>M</td> </tr> </table> <table border="1" data-bbox="987 411 1503 486"> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> <td>M</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	M	M	M	L	M	M	Jul	Aug	Sep	Oct	Nov	Dec	L	L	M	M	M	M	Georgetown
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M	M	M	L	M	M																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	M	M	M	M																							

REGION RISK PROFILE

Name of the region: REGION 1 (Barima Waini)								
Hazard	Triggers	Probability of impact on education sector (high/medium/low)	Frequency (annually/twice a year/episodically/etc....)				Specific location/ township	
			Months and intensity (high/medium/low)					
Drought	Dry Season	High 28% of schools are located along the rivers. 18% of schools are connected to the water distribution grid. All other schools depend on rain water for potable water	Frequency: Twice per year Months and intensity:				Moruca: Karaburi Wallaba Kwebanna Waramuri Manawarin Kamwatta Mabaruma: Schools along the rivers: Aruka, Barima, Kaituma, Waini Matarkai: Arakaka Baramita Sebai	
			Jan	Feb	Mar	Apr	May	Jun
			L	M	M	H	M	L
			Jul	Aug	Sep	Oct	Nov	Dec
			M	H	H	M	L	L

Floods	Rainy Season	<p>Medium</p> <p>28% of schools are located along the rivers. these schools are affected by flooding during the rainy season compounded by high and spring tides</p>	<p>Frequency: Twice per year</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 300 1503 373"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>M</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1" data-bbox="987 411 1503 485"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>L</td> <td>L</td> <td>M</td> <td>H</td> <td>H</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	M	M	L	L	H	H	Jul	Aug	Sep	Oct	Nov	Dec	M	L	L	M	H	H	<p>Mabaruma:</p> <p>Schools along the rivers: Aruka, Barima, Kaituma, Waini</p>
Jan	Feb	Mar	Apr	May	Jun																							
M	M	L	L	H	H																							
Jul	Aug	Sep	Oct	Nov	Dec																							
M	L	L	M	H	H																							
Erosion	<p>Rainy season</p> <p>High tides</p>	<p>Medium</p> <p>Heavy rainfall inundates the muddy land mass, high tides causes the water to break over the revetment, erosion of the land happens. Coastal erosion on Almond Beach is a continuous process.</p> <p>The new school in Baramita is built on loose soil, rain softens the earth below.</p>	<p>Frequency: Twice per year (rainy season), episodically with spring tides</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 676 1503 750"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>M</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1" data-bbox="987 788 1503 861"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>L</td> <td>L</td> <td>M</td> <td>H</td> <td>H</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	M	M	L	L	H	H	Jul	Aug	Sep	Oct	Nov	Dec	M	L	L	M	H	H	<p>Mabaruma:</p> <p>Schools along the rivers: Aruka, Barima, Kaituma, Waini</p> <p>Baramita</p>
Jan	Feb	Mar	Apr	May	Jun																							
M	M	L	L	H	H																							
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M	L	L	M	H	H																							

Disease outbreak	Flooding Rainy season Mining	<p>Medium</p> <p>Flooding, excess water on the land and stagnant water due to mining activities causes the spread of vector borne diseases such as malaria and dengue</p> <p>Infectious diseases are also spread in communities near the Venezuelan borders</p> <p>Highly contagious diseases such as Covid-19 has the highest impact on the education sector.</p>	<p>Frequency: Periodically</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 300 1503 376"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>M</td> <td>L</td> <td>L</td> <td>M</td> <td>M</td> </tr> </tbody> </table> <table border="1" data-bbox="987 411 1503 488"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>L</td> <td>L</td> <td>L</td> <td>M</td> <td>M</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	M	M	L	L	M	M	Jul	Aug	Sep	Oct	Nov	Dec	M	L	L	L	M	M	<p>Mabaruma: Schools along the rivers: Aruka, Barima, Kaituma, Waini</p> <p>Communities along the Venezuelan Border</p> <p>Baramita</p>
Jan	Feb	Mar	Apr	May	Jun																							
M	M	L	L	M	M																							
Jul	Aug	Sep	Oct	Nov	Dec																							
M	L	L	L	M	M																							
Water pollution	Dumping of solid waste Mining	<p>Low</p> <p>Irresponsible dumping of solid waste in the water ways has contributed to diseases and to water becoming unusable</p> <p>Mining activities have also rendered the water in the rivers unusable, there is little flora and fauna in the rivers</p>	<p>Frequency: Episodically, with the discovery of gold and other precious minerals in a particular area</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 1038 1503 1115"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <table border="1" data-bbox="987 1150 1503 1227"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	L	L	L	<p>Mabaruma: Schools along the Barima River</p> <p>Moruca: Schools along the Barama River</p> <p>Matarkai: Port Kaituma</p>
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	L	L	L																							

		affected by the mining activities																										
Forest fires	Excessive heat and dry season Man igniting the open savannah lands during the dry seasons to make the savannahs accessible when the rains come (boats can pass easily)	Low Spoke pollution is the main impact factor, schools are closed for the short period due the fires Flying embers and schools close to the forest stand the risk of igniting	Frequency: Twice per year (during the dry seasons) Months and intensity: <table border="1"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>M</td> <td>M</td> <td>H</td> <td>M</td> <td>L</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>H</td> <td>H</td> <td>M</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	M	M	H	M	L	Jul	Aug	Sep	Oct	Nov	Dec	M	H	H	M	L	L	Moruca: Schools within the central Moruca area and Assakata Village
Jan	Feb	Mar	Apr	May	Jun																							
L	M	M	H	M	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
M	H	H	M	L	L																							

REGION RISK PROFILE

Name of the region: REGION 2 (Pomeroon Supenaam)								
Hazard	Triggers	Probability of Impact on Education Sector (high/medium/low)	Frequency (annually/twice a year/episodically/etc....)				Specific location/township	
			Months and intensity (high/medium/low)					
Floods	Summer monsoon from October to December	Medium because only 14/87 schools are affected by high tides and precipitation	Frequency: Episodically Months and intensity:				Lower Pomeroon (rural areas)	
			Jan	Feb	Mar	Apr	May	Jun
							✓	✓
			Jul	Aug	Sep	Oct	Nov	Dec
						✓	✓	✓
Salt water	Periodically dependent on the tide	Low because most of the schools are equipped with water tanks for drinking purposes. However, the salt water will affect vegetation.	Frequency: Episodically Months and intensity:				Upper and lower Pomeroon	
			Jan	Feb	Mar	Apr	May	Jun
			✓	✓	✓	✓	✓	✓
			Jul	Aug	Sep	Oct	Nov	Dec
			✓	✓	✓	✓	✓	✓
Drought	Prolong dry season	Medium because only a few schools are affected	Frequency: Annually Months and intensity:				Upper and lower Pomeroon and lakes	
			Jan	Feb	Mar	Apr	May	Jun
				✓	✓	✓		
			Jul	Aug	Sep	Oct	Nov	Dec
				✓	✓			

REGION RISK PROFILE

Name of the region: REGION 3 (Essequibo Islands West/ Demerara)																												
Hazard	Triggers	Probability of Impact on Education Sector (high/medium/low)	Frequency (annually/twice a year/episodically/etc....) Months and intensity (high/medium/low)	Specific location/township																								
Floods	<p>Overtopping of the sea defense during the spring tides</p> <p>Damage to the conservancy dams</p> <p>Breakage of a sluice or koker doors</p> <p>Prolong heavy rain fall</p> <p>Clogged drains and canals</p>	High	<p>Frequency:</p> <p>Months and intensity:</p> <table border="1"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>M</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>H</td> <td>L</td> <td>L</td> <td>M</td> <td>H</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	M	H	H	Jul	Aug	Sep	Oct	Nov	Dec	L	H	L	L	M	H	<p>Vreed-en- Hoop WCD</p> <p>Leonora WCD</p> <p>Stewartville WCD</p> <p>Uitvlugt WCD</p> <p>Den Amstel WCD</p> <p>Goed Intent WBD</p> <p>Patentia WBD</p> <p>Sisters Village WBD</p> <p>Two Brothers Village, Canal #1</p> <p>Good Hope, Canal #1</p> <p>Endeavour, Canal #1</p> <p>Canal Polders</p>
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	M	H	H																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	H	L	L	M	H																							

High winds	Spill off hurricane season in the Caribbean Atlantic storms	High	<p>Frequency: Months and intensity:</p> <table border="1" data-bbox="987 300 1503 373"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>H</td> <td>M</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1" data-bbox="987 411 1503 485"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	H	M	H	H	Jul	Aug	Sep	Oct	Nov	Dec	H	H	L	L	L	L	<p>Islands Leguan Wakenaam Hog Islands Fort Islands</p> <p>Vreed-en- Hoop to Parika (All villages along the coast and bank)</p> <p>Plantain Walk to Patentia (Villages along the West bank of Demerara River)</p>
Jan	Feb	Mar	Apr	May	Jun																							
L	L	H	M	H	H																							
Jul	Aug	Sep	Oct	Nov	Dec																							
H	H	L	L	L	L																							
Substance abuse	Family history Mental health issues Environmental issues Celebrations e.g. January: New Year's February: Mashramani March – April: Easter and Phagwah June: Weddings	High	<p>Frequency: Months and intensity:</p> <table border="1" data-bbox="987 882 1503 956"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>M</td> <td>H</td> </tr> </tbody> </table> <table border="1" data-bbox="987 994 1503 1067"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	H	H	H	H	M	H	Jul	Aug	Sep	Oct	Nov	Dec	H	H	L	L	L	H	All villages throughout the region
Jan	Feb	Mar	Apr	May	Jun																							
H	H	H	H	M	H																							
Jul	Aug	Sep	Oct	Nov	Dec																							
H	H	L	L	L	H																							

	and funerals July – August: Picnics and sports December: Christmas			
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REGION RISK PROFILE

Name of the region: REGION 4 (Demerara Mahaica)																															
Hazard	Triggers	Probability of impact on education sector (high/medium/low)	Frequency (annually/twice a year/episodically/etc....)				Specific location/township																								
			Months and intensity (high/medium/low/no school)																												
Floods	High tide, broken sluice/pump from May to June and November to December	High because schools in flood-prone areas are usually flooded	Frequency: Annually Months and intensity: <table border="1" style="margin-top: 10px;"> <tr> <th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th></tr> <tr> <td>L</td><td>L</td><td>M</td><td>M</td><td>H</td><td>H</td></tr> </table> <table border="1" style="margin-top: 10px;"> <tr> <th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr> <tr> <td>NS</td><td>NS</td><td>M</td><td>M</td><td>H</td><td>H</td></tr> </table>				Jan	Feb	Mar	Apr	May	Jun	L	L	M	M	H	H	Jul	Aug	Sep	Oct	Nov	Dec	NS	NS	M	M	H	H	Town A: East Coast Town B: East Bank
Jan	Feb	Mar	Apr	May	Jun																										
L	L	M	M	H	H																										
Jul	Aug	Sep	Oct	Nov	Dec																										
NS	NS	M	M	H	H																										
Drought	Dried up river and water wells	High because schools in areas that depend on the river as source for potable water	Frequency: Annually Months and intensity: <table border="1" style="margin-top: 10px;"> <tr> <th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th></tr> <tr> <td>M</td><td>M</td><td>H</td><td>H</td><td>L</td><td>L</td></tr> </table> <table border="1" style="margin-top: 10px;"> <tr> <th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr> <tr> <td>NS</td><td>NS</td><td>M</td><td>M</td><td>L</td><td>L</td></tr> </table>				Jan	Feb	Mar	Apr	May	Jun	M	M	H	H	L	L	Jul	Aug	Sep	Oct	Nov	Dec	NS	NS	M	M	L	L	Highway, riverine and remote
Jan	Feb	Mar	Apr	May	Jun																										
M	M	H	H	L	L																										
Jul	Aug	Sep	Oct	Nov	Dec																										
NS	NS	M	M	L	L																										
Erosion	Due to floods or rise in river water	High because schools in areas that depend on the trail to get access to the schools makes it impossible	Frequency: Annually Months and intensity: <table border="1" style="margin-top: 10px;"> <tr> <th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th></tr> <tr> <td>L</td><td>L</td><td>M</td><td>M</td><td>H</td><td>H</td></tr> </table> <table border="1" style="margin-top: 10px;"> <tr> <th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr> <tr> <td>NS</td><td>NS</td><td>M</td><td>M</td><td>H</td><td>H</td></tr> </table>				Jan	Feb	Mar	Apr	May	Jun	L	L	M	M	H	H	Jul	Aug	Sep	Oct	Nov	Dec	NS	NS	M	M	H	H	Highway, riverine and remote
Jan	Feb	Mar	Apr	May	Jun																										
L	L	M	M	H	H																										
Jul	Aug	Sep	Oct	Nov	Dec																										
NS	NS	M	M	H	H																										

Noise pollution	Due to loud music from private residents and vehicles	High because schools in areas that are close to the priority or public roads and rum shops and bars that play loud music	<p>Frequency: Annually</p> <p>Months and intensity:</p> <table border="1"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> </tr> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>NS</td> <td>NS</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	H	H	H	H	H	H	Jul	Aug	Sep	Oct	Nov	Dec	NS	NS	H	H	H	H	East Coast and East Bank
Jan	Feb	Mar	Apr	May	Jun																							
H	H	H	H	H	H																							
Jul	Aug	Sep	Oct	Nov	Dec																							
NS	NS	H	H	H	H																							
Air pollution	Due to live stock farming from private residents	High because schools in areas that are close to private residents who engage in small- and large-scale livestock farming	<p>Frequency: Annually</p> <p>Months and intensity:</p> <table border="1"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> </tr> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>NS</td> <td>NS</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	H	H	H	H	H	H	Jul	Aug	Sep	Oct	Nov	Dec	NS	NS	H	H	H	H	East Coast and East Bank
Jan	Feb	Mar	Apr	May	Jun																							
H	H	H	H	H	H																							
Jul	Aug	Sep	Oct	Nov	Dec																							
NS	NS	H	H	H	H																							
Bush fire	Due to the heat waves	Medium because schools in areas that are dense with vegetation	<p>Frequency:</p> <p>Months and intensity:</p> <table border="1"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>M</td> <td>M</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> </tr> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>NS</td> <td>NS</td> <td>M</td> <td>M</td> <td>L</td> <td>L</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	M	M	H	H	L	L	Jul	Aug	Sep	Oct	Nov	Dec	NS	NS	M	M	L	L	Highway and remote
Jan	Feb	Mar	Apr	May	Jun																							
M	M	H	H	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
NS	NS	M	M	L	L																							

REGION RISK PROFILE

Name of the region: REGION 5 (Mahaica Berbice)																															
Hazard	Triggers	Probability of impact on education sector (high/medium/low)	Frequency (annually/twice a year/episodically/etc....) Months and intensity (high/medium/low)				Specific location/township																								
Floods	High rainfall Overtopping of sea/river defenses Breach of sea and river defenses Overflowing drain from heavy rain fall	Medium	Frequency: Months and intensity: <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>L</td> <td>L</td> <td>L</td> <td>M</td> <td>M</td> </tr> </tbody> </table> <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> <td>M</td> </tr> </tbody> </table>				Jan	Feb	Mar	Apr	May	Jun	M	L	L	L	M	M	Jul	Aug	Sep	Oct	Nov	Dec	L	L	M	M	M	M	Carlton Hall Zealand Bygeval Rosignol Moraikobai
Jan	Feb	Mar	Apr	May	Jun																										
M	L	L	L	M	M																										
Jul	Aug	Sep	Oct	Nov	Dec																										
L	L	M	M	M	M																										
Fire	Prolong dry weather (dry climate) Faulty electrical installation Intentionally set Malfunctioning chemicals interacting in a chemistry lab	Low	Frequency: Months and intensity: <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> <td>L</td> </tr> </tbody> </table>				Jan	Feb	Mar	Apr	May	Jun	L	L	M	M	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	M	M	M	L	Moraikobai
Jan	Feb	Mar	Apr	May	Jun																										
L	L	M	M	L	L																										
Jul	Aug	Sep	Oct	Nov	Dec																										
L	L	M	M	M	L																										

Air pollution	Dust from construction site Spraying of pesticides Dust and exhaust fumes from factories	Low/medium	Frequency: Months and intensity: <table border="1" data-bbox="987 300 1500 373"> <tr><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th></tr> <tr><td>L</td><td>L</td><td>M</td><td>M</td><td>M</td><td>M</td></tr> </table> <table border="1" data-bbox="987 400 1500 474"> <tr><th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr> <tr><td>L</td><td>L</td><td>L</td><td>M</td><td>M</td><td>L</td></tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	M	M	M	M	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	M	M	L	Bygeval Gordon Table Abary Karamat Groden Blairmont Ithaca Rosignol
Jan	Feb	Mar	Apr	May	Jun																							
L	L	M	M	M	M																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	M	M	L																							
Bee infestation	Human activity Animals roaming within the vicinity	Low	Frequency: Months and intensity: <table border="1" data-bbox="987 624 1500 697"> <tr><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th></tr> <tr><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td></tr> </table> <table border="1" data-bbox="987 724 1500 798"> <tr><th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr> <tr><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td></tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	L	L	L	Abary No.8 Bath Calcutta Augsburg Belladrum
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	L	L	L																							
Water contamination	Use of fertilizers and pesticides Improper garbage disposal	Low	Frequency: Months and intensity: <table border="1" data-bbox="987 943 1500 1016"> <tr><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th><th>Jun</th></tr> <tr><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td></tr> </table> <table border="1" data-bbox="987 1043 1500 1117"> <tr><th>Jul</th><th>Aug</th><th>Sep</th><th>Oct</th><th>Nov</th><th>Dec</th></tr> <tr><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td></tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	L	L	L	Bush Lot Blairmont Bygeval Carlton Hall
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	L	L	L																							

Solid waste disposal	Improper garbage disposal Untimely removal of garbage	Low	<p>Frequency: Months and intensity:</p> <table border="1" data-bbox="987 300 1500 375"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </table> <table border="1" data-bbox="987 402 1500 477"> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	L	L	L	Bush lot
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	L	L	L																							

REGION RISK PROFILE

Name of the region: REGION 6 (East Berbice Corentyne)								
Hazard	Triggers	Probability of impact on education sector (high/medium/low)	Frequency (annually/twice a year/episodically/etc....)			Specific location/towns		
			Months and intensity (high/medium/low)					
Floods	Precipitation/rain fall (change in weather patterns) Breaches in sea defense Overtopping of the conservancy Topography of the land.	High because many schools are affected by floods due to convectional rainfall.	Frequency: Twice per year Months and intensity:			Corriverton Rose Hall New Amsterdam Tagore Fort Ordnance		
			Jan	Feb	Mar	Apr	May	Jun
			M	L	L	L	H	H
			Jul	Aug	Sep	Oct	Nov	Dec
			L	L	L	L	M	M
Air pollution	Indiscriminate dumping of garbage /animal carcasses. Stench from cattle and chicken farms soot from sugar cane Emission of saw dust from	Medium	Frequency: Episodically Months and intensity:			Fort Ordnance Tagore Edinburgh New Amsterdam/Canje East Bank Albion/Fyrish/Chesney New Amsterdam		
			Jan	Feb	Mar	Apr	May	Jun
			L	M	H	H	M	M
			Jul	Aug	Sep	Oct	Nov	Dec
			M	M	M	H	H	L

	sawmills.																											
Solid waste disposal	Poor garbage collection mechanisms. The untimely collection of garbage also poses a challenge. Indiscriminate dumping of garbage around the school and its surrounding.	Medium	Frequency: Periodically Months and intensity: <table border="1"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>M</td> <td>M</td> <td>M</td> <td>L</td> <td>M</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> <td>M</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	M	M	M	L	M	Jul	Aug	Sep	Oct	Nov	Dec	L	L	M	M	M	M	New Amsterdam Corriverton Lower and Central Corentyne East Bank
Jan	Feb	Mar	Apr	May	Jun																							
L	M	M	M	L	M																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	M	M	M	M																							
Water contamination	Overflowing and clogged drains Damaged supply lines and leaking pipes Improper disposal of industrial waste Animal farms located in close proximity to waterways Poor farming practices. E.g. pesticides	Medium	Frequency: Episodically Months and intensity: <table border="1"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> <td>L</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>M</td> <td>M</td> <td>M</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	M	M	M	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	M	M	M	Corriverton New Amsterdam Black Bush Polder East Bank Canje Central and Lower Corentyne
Jan	Feb	Mar	Apr	May	Jun																							
L	L	M	M	M	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	M	M	M																							

Bee Infestation	Large vegetative cover surrounding schools. Blooming of Plants. Plants in their reproductive stage.	Low	<p>Frequency: Episodically</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 300 1503 376"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <table border="1" data-bbox="987 400 1503 477"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>M</td> <td>H</td> <td>H</td> <td>H</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	M	H	H	H	L	Canje New Amsterdam Corentyne (upper, lower central) East Bank
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	M	H	H	H	L																							
Bush/wildiire	Excessive heat/ high temperature	Low	<p>Frequency: Episodically</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 671 1503 748"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <table border="1" data-bbox="987 772 1503 849"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	H	H	L	L	Corriverton Rose Hall New Amsterdam Canje
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	H	H	L	L																							
High Winds	Proximity to Corentyne/ Berbice River and the Atlantic Ocean /No.63 Beach Freak storms	Low	<p>Frequency: Episodically</p> <p>Months and intensity:</p> <table border="1" data-bbox="987 991 1503 1067"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <table border="1" data-bbox="987 1091 1503 1168"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>M</td> <td>H</td> <td>H</td> <td>H</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	M	M	H	H	H	L	Skeldon Tagore No.63 Canje
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
M	M	H	H	H	L																							

Traffic/road accidents	Improper use of the road E.g. speeding cars. Misuse of the road especially during periods of rice harvesting.	Low	<p>Frequency: Episodically Months and intensity:</p> <table border="1" data-bbox="987 300 1503 373"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </table> <table border="1" data-bbox="987 400 1503 474"> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	L	L	L	L	L	Corriverton Lower and Central Corentyne
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
L	L	L	L	L	L																							
Drought	Altered weather patterns	Low	<p>Frequency: Episodically Months and intensity:</p> <table border="1" data-bbox="987 616 1503 689"> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </table> <table border="1" data-bbox="987 716 1503 790"> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> <tr> <td>M</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> </tr> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	M	H	H	L	L	L	East Bank Orealla
Jan	Feb	Mar	Apr	May	Jun																							
L	L	L	L	L	L																							
Jul	Aug	Sep	Oct	Nov	Dec																							
M	H	H	L	L	L																							

REGION RISK PROFILE

Name of the region: REGION 8 (Potaro Siparuni)																												
Hazard	Triggers	Probability of impact on education sector (High/medium/low)	Frequency (annually/twice a year/episodically/etc....) Months and intensity (high/medium/low)	Specific location/towns																								
Floods	Raining sessions extended from April to July	High several highly populated schools including two secondary institutions, are affected.	Frequency: Annually Months and intensity: <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>M</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	M	L	L	H	H	H	Jul	Aug	Sep	Oct	Nov	Dec	H	M	L	L	H	H	Chenapou Kaibarupai Waipa Kanapang Bamboo Creek Tuseneng Sand Hills Paramakatoi Kato Itabac
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Drought	Minimal rain falls during the dry season.	Medium a few schools are affected due to residents travelling for lengthy distances to access potable water.	Frequency: Quarterly Months and intensity: <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <table border="1" style="margin-top: 10px;"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td></td> <td>H</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	L	L	L	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec		H	H	H	L	L	Itabac Kamana Kurukubaru Kato Paramakatoi Micobie
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Water pollution	Prolonged rainfall resulting in flooding	Over flowing of sewage systems. Destruction of cash crops	<p>Frequency: Annually</p> <p>Months and intensity:</p> <table border="1" data-bbox="920 300 1431 373"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1" data-bbox="920 411 1431 485"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>M</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	M	L	L	H	H	H	Jul	Aug	Sep	Oct	Nov	Dec	H	M	L	L	H	H	<p>Monkey Mountain</p> <p>Kato</p> <p>Kanapang</p> <p>Campbelltown</p> <p>Micobie</p> <p>Chenapou</p>
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Crop pest and diseases	Prolong dry and/or wet seasons	Food shortage	<p>Frequency: Annually</p> <p>Months and intensity:</p> <table border="1" data-bbox="920 596 1431 670"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>M</td> <td>M</td> <td>H</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <table border="1" data-bbox="920 708 1431 782"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>M</td> <td>H</td> <td>H</td> <td>M</td> <td>M</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	M	M	M	H	H	H	Jul	Aug	Sep	Oct	Nov	Dec	M	M	H	H	M	M	<p>Kurukubaru</p> <p>Kato</p> <p>Paramakatoi</p> <p>Taruka</p> <p>Monkey Mountain</p> <p>Kanapang</p> <p>Chenapou</p> <p>Campbelltown</p>
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Air pollution	High intensity winds	Discoloration of buildings, furnishings and teaching learning materials mounted on walls	<p>Frequency: Annually</p> <p>Months and intensity:</p> <table border="1" data-bbox="920 949 1431 1023"> <thead> <tr> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>M</td> <td>M</td> <td>L</td> <td>L</td> <td>L</td> </tr> </tbody> </table> <table border="1" data-bbox="920 1061 1431 1134"> <thead> <tr> <th>Jul</th> <th>Aug</th> <th>Sep</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>H</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> </tr> </tbody> </table>	Jan	Feb	Mar	Apr	May	Jun	M	M	M	L	L	L	Jul	Aug	Sep	Oct	Nov	Dec	L	H	H	H	L	L	<p>Kato</p> <p>Micobie</p> <p>Campbelltown</p>
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MAIN IMPACTS OF RISKS ON THE EDUCATION SECTOR

1. Flood: region 4, region 10, Georgetown, region 2, region 3, region 8, region 1, region 7, region 5, region 6

Type of risk	Impact on access	Impact on quality and learning	Impact on equity	Impact on management
Flood	Damaged/destroyed education facilities and teaching and learning materials	Loss of instructional time	Widening gap between students from different socio economic ladder	Disruption of PTA and other community based structure, absence of key education management staff – disruption of important statutory activities
	Closure of school due to flooding	Destruction of furniture and other equipment hinders quality education	Increase in disparity between regions affected and non-affected by flooding	Destruction of education records and archives (e.g. pedagogical and student files)
	Inaccessible roadways and dams which renders schools inaccessible	Temporary interruption of learning leading to perturbation in school calendar (could result in failing exams and additional strain on the system to establish remedial classes)	Inaccessibility of hygiene facilities in school building leading to an increase in absenteeism for some students (especially girls)	Disruption in data collection process at all levels, and especially at school level
	Flooding of the lower flat of the building and compound	Psychosocial distress following the disaster	Areas with poorer infrastructure are more prone to destruction and less likely to recover after a disaster	Disruption in school inspection routines, inability of school managers, administrators and supervisors to access schools

	Schools are used as shelters after a disaster	Displaced students are forced to study at home or in overcrowded classrooms	Impossibility or delays in transporting needed materials to remote areas	Budgetary strain, reconstructive works to be done on accessways, drainage and irrigation, river defence
	Extended closure of schools to facilitate sanitation and fumigation exercises	Lack of teachers in case of displacement		Difficulty in communication with the Department of Education for timely submission of records and to address needs of staffs and learners
	Outbreaks in skins and water borne diseases – health issues arising from prolonged exposure to flooding (dengue fever, malaria, leptosiporis)			

2. Drought: region 1, region 2, region 4, region 6, region 9, region 10

Type of risk	Impact on access	Impact on quality and learning	Impact on equity	Impact on management
Drought	Unavailability of domesticated water (drinking and for other usage) for basic requirements	High rate of students' absenteeism and irregularity and unpunctuality of teachers leading to loss of instructional time	Inaccessible WASH facilities result in increased absenteeism (especially for girls)	Abuse of leave concession by teachers
	Outbreak in airborne diseases increasing unhealthy and insanitary	Psychosocial distress due to food shortage and health problems	Increased disparities between rural and coastal areas	Additional expenses due to provision of water tanks and fuel to transport potable

	conditions			water to schools
	Impossibility to meet basic health and hygienic needs	Deteriorated learning and teaching conditions due to increase in temperatures	Boys are burdened with additional chores of fetching water	Emergency Budget planning and Acquisition of Emergency finance, do not cater for repairs, replacement, sanitation and fumigation
	Premature school closure	The malnutrition of students affects their learning capacities	Underprivileged families are at a disadvantaged. May lead to interruption of poorer children's schooling	Lack of collaborative efforts between village leaders, GWI and RDCs
	Teaching may be forced to leave the areas due to shortage of food	Destruction of schools' agriculture plot		Increase in spending for dormitories and schools

3. Water pollution: region 1, region 5, region 6, region 7, region 8, region 10

Type of risk	Impact on access	Impact on quality and learning	Impact on equity	Impact on management
Water Pollution	Temporary closure of schools due to contaminated water in schools	Poor attendance since children look forward to a hot meal from schools, which are not able to prepare meals	Increased disparity between water contaminated affected and non-affected areas	Increase expenses for the provision of fresh and potable water for schools
	Spread of diseases due to polluted water result in increase in students' absenteeism	The malnutrition of students affect their learning capacities	Families that depend on the rivers for food are most affected as they rely directly on these natural resources	Disruption in school supervision routine
	Outbreak of skin rashes and other water borne diseases	Learning loss and interruption of curriculum delivery as a result of temporary disruption	Underprivileged learners will not be able to purchase treated water and will have	School managers are compelled to allocate resources of Social Welfare to

		of classes	to drink untreated water that is available at school	mitigate the negative impact of water pollution
	For families that depend on the rivers for food, shortage of food may hinder students from going to school	Health issues impact students' normal growth and development which negatively impacts their education performance	Schools with strong PTA's and other support systems may be able to afford water purification systems at their schools while less fortunate schools will not be able to afford these systems	Planned activities cannot be executed
		Learners have to travel long distance to fetch water on a daily basis resulting in physical fatigue during this time and increase in dropout rates		Incomplete and untimely record submission resulting from disrupted schedules for statutory meetings

4. Bush fire: region 1, region 4, region 5, region 6, region 10

Type of risk	Impact on access	Impact on quality and learning	Impact on equity	Impact on management
Bush fire	Destruction and damage of school buildings	Closure of schools will result in learning loss	Displaced children are more likely to be left behind	Destruction of school records
	Destruction of students' homes increasing rate of absenteeism	Destruction of teaching and learning materials	Disparities between fire affected areas and non-affected areas	Increase expenses for the provision of alternative accommodation for students, replacement of furniture and equipment, and reconstruction of school building
	Smoke pollution will force	Shortage of teachers due to	Learners and teachers with	Disruption in the data

	temporary closure of schools	forced displacement	respiratory ailments are more vulnerable and thus more likely to be absent	collection process at school level
	Forced displacement of learners and teachers	Psychosocial distress, students losing confidence	Underprivileged learners may have difficulty accessing quality health care	Interruption of supervision routines
		Planned activities cannot be executed, setbacks in the progress of programmes, especially when it comes to the School Based Assessment component and curriculum coverage	Schools along trails and coal mining area are more affected	Interruption of scheduled administrative and other planned activities.at the school level.E.g. Conduct of Staff Development Sessions, Supervision, PTA Meetings, SIAC Meetings, Finance Committee Meeting.
		Reduced outdoor learning activities		

5. Air pollution: region 4, region 5, region 6, region 8, region 10

Type of risk	Impact on access	Impact on quality and learning	Impact on equity	Impact on management
Air pollution	Temporary closure of schools	Learning loss as a result of temporary disruption of classes	Learners and teachers with respiratory ailments are more vulnerable and more likely to be absent	Disruption in school supervision routines
	Learners and teachers with respiratory issues may not be able to attend school	Learning loss as a result of illness	Disparities between air polluted affected and non-affected areas	Disruption in data collection process at school level
	Stench emanating from	Difficulty in maintaining safe,	Learners and teachers living	Equipment and fixtures

	livestock and poultry farm	sanitary and orderly external environment, which affects learning and performance	close to sugarcane estates and sawmills are more vulnerable and more likely to be absent from school	exposed to saw dust, salt water, etc. Regular maintenance of tools and equipment, machinery and buildings becomes a necessity
	Delays in transporting examination papers	Defaced teaching and learning materials (e.g. soot which emanate from burning sugarcane fields)	Underprivileged learners may have difficulty accessing quality health care	Increased cost to replace learning resources and support materials on a regular basis

6. Disease outbreak: region 1, region 7

Type of risk	Impact on access	Impact on quality and learning	Impact on equity	Impact on management
Disease outbreak	Closure of schools to prevent the risk of infection and the spread of the virus	Learning not fully completed in the absence of online platforms	Gap between children who have access to digital platforms and devices to access online classes and those who cannot afford it	Disruption of PTA and other community based structures, absence of key school management staff
	Lack of automatic implementation of rotation/shift system to avoid large gathering to avoid the spread of infectious diseases	Children will miss out on interaction with teachers and with other students	Children whose parents are working/ in single parent household are at a disadvantage as they may not receive adequate support to supervise their learning at home	Supervision process interrupted due to disease outbreak
		Difficulty to maintain children's attention and motivation with limited face	Increase in disparity between regions and schools affected and non-affected by	

		to face interactions, children may not understand concepts clearly	disease outbreak	
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Annex 3 Summary of the main systemic weaknesses of the education system and implications on the emergency response

ACCESS

Main impacts on the education sector	Main weaknesses of education system	Effects on an emergency response
Damaged/destroyed education facilities and loss of instructional time	Location of some schools does not take into account risks of natural hazards such as flooding	Classroom activities and learning sessions are likely to be suspended if there are not enough classrooms available. Provoke delay of study programs which severely impacts educational outcomes and children’s overall development
	Regions do not have maintenance plans based on the conditions survey	
Displaced students are forced to study at home or in overcrowded classrooms	Temporary physical spaces have not been identified/ are not always available for teaching and learning. Education facilities are occasionally used as shelters	Poor learning conditions prevail which have negative impacts on educational outcomes
Inaccessible roadways and dams, which renders schools inaccessible	Poorly constructed bridges into school compounds. Maintenance budget not adequate for “other infrastructure“	Provoke delay of study programs which severely impacts educational outcomes
Difficulties to ensure continuity of education	Poor internet connectivity and technological devices and within education communities Lack of alternative learning modalities	Loss of learning time which leads to diminished learning outcomes
Increase absenteeism, especially for girls	Inadequate toilets, clean drinking water and hand washing facilities in some education buildings	Unavailability of sanitation service, which was already limited, following a disaster. Increase drop-out rate, especially among female

		students
Learners with special needs are most vulnerable	Limited quality data to understand and address equity and inclusion issues for learners with special needs	Learners with special needs may experience amplified risk in disaster situation. They are often excluded from emergency preparedness planning at all levels of governments, which leave them unprepared for emergencies.
Disparities between language groups are exacerbated, including for indigenous populations Venezuelan migrants	Language of instruction policy does not sufficiently cater for language differences, including for Venezuelan migrants	Disparities are exacerbated for indigenous populations and Venezuelan migrants and learners whose first language is not English

QUALITY

Main impacts on the education sector	Main weaknesses of education system	Effects on an emergency response
Damaged/destroyed education facilities and teaching and learning materials	Storage equipment for teaching and learning materials are not hazard resilient	Destruction or damage following a natural hazard means that students and teachers will lack adequate teaching material, which may impede educational continuity
	Provision of damaged teaching and pedagogical materials made under the grants system, however grants are released based on a fixed cash flow and as a consequence may not cater for untimely needs	
Difficulty to maintain children's attention and motivation with limited face to face interactions, children may not understand concepts clearly	Not enough schools have enough space to allow learners to return to education facilities in safe manner, whilst respecting social distancing	Children who lack support may dropout from school and never return
The malnutrition due food shortage affect students'	No targeted school feeding programme for	

learning capacities/ suspension of school feeding programs affect most vulnerable students	vulnerable population during the emergency	
	Timing of garbage disposal and missed visits creates pile up Inadequate number of bins across some education facilities Some education facilities in Hinterland areas use pits behind the compound for burning	Limits to the approach of WASH programmes, leading to littering of some education compounds
Outbreaks in skin and water borne diseases – health issues arising from prolonged exposure to flooding (dengue fever, malaria, leptosiporis)		Learners and teachers with respiratory ailments are more vulnerable and thus more likely to be absent
Poor quality of remote learning delivery	All teachers, including volunteer teachers lack adequate training to deliver educational content, via online modalities and other modalities	Volunteer teachers do not have knowledge and skills to deliver educational content or apply various alternative methods when needed e.g. outreach school, open air teaching class with children from different grades, etc.)
Some teachers are living out of the catchment of the schools and return home when crisis hits and are therefore unavailable	Inadequate numbers of teachers from communities Insufficient supply of volunteer teachers Roster of teachers who can be rapidly deployed is not available	Classroom activities and learning sessions are likely to be suspended if there are not enough teachers available. Failing to continue education increases dropout rates and results in lifelong negative impact
Teachers are not able to respond quickly in crisis	Lack of teachers’ training on Education in Emergency, and for risk reduction	Teachers do not have awareness of the risks and potential impacts of disasters and do not receive basic training on what to do during a disaster prior to a disaster occurring, which put them at greater risk and vulnerability
Psychosocial distress following a disaster not	Welfare and Guidance and Counselling officers have	Inability to identify learners requiring specialised protection services or

addressed	limited skills in addressing the psychosocial needs of teachers and learners Lack of welfare officers for educational institutions	refer children to specialised services as needed Children who do not have access to school are more vulnerable to the increased risks that go hand-in hand with disasters, including violence, sexual exploitation and child labor. Children who are forced out of school due to lack of available space may never return
Psycho-social effects for learners and teachers due to long-term isolation and limited social contacts		
Inability to effectively supervise and check work completed by learners at a distance	No special system in place for grading or monitoring learners remotely	Children are likely to fall behind in school
Loss of instructional time	No make-up classes / flexible school calendar for affected learners No catch-up/accelerated learning programmes that condense curricula in order to make up for lost time	Provoke delay of study programs which severely impacts educational outcomes and children's overall development

MANAGEMENT

Main impacts on the education sector	Main weaknesses of education system	Effects on an emergency response
REDO officials may not be prepared to respond or implement prevention measures	No risk management plan in place at REDO levels	A lack of an emergency preparedness plan may create further delays emergency response
School-level officials may not be prepared to respond or implement prevention measures	Inadequate disaster risk management planning at school level	A lack of an emergency preparedness plan may create further delays emergency response
Difficulty in communication with the Department of Education for timely submission of records and to address needs of staff and learners that have been impacted by crisis	Issues in communication within regions due to remoteness of some regions and limited access to digital technology to provide information on impact of disasters	It takes more time to reach central level when an emergency occurs and to plan for response without digital technology, which will slow the emergency response. Emergency responses may not fit the context due to the lack of timely

	<p>Delays in REDOs submitting info to Central MoE which then plans and aims to develop targeted interventions for all</p> <p>No focal points or specific units tasked with risk management at REDO or Central levels of the MoE.</p> <p>Limited routine communication between REDO and Central MoE</p>	communication.
Damage to education facilities or equipment	<p>Untimely intervention by the Engineering Department because there may be insufficient capacities at sub-national levels, resulting in a dependence on central level engineering department or external contractors</p>	Maintenance problems are not taken into account in a timely fashion and may disrupt learning processes
Occasional interruption of scheduled supervision activities at the school level because supervisors are impacted themselves or can't visit schools	<p>Inadequate supervision in emergency-affected areas</p> <p>Limited provision for virtual supervision visits and communication</p>	
Disruption of PTA and other community based structures, absence of key school management staff - disruption of important statutory activities, including supervisory visits	<p>Limited support mechanisms for parents</p> <p>Limited provision for virtual communication with school management bodies and PTAs in some education facilities</p>	
High rate of students' absenteeism	No tracking device to track learners' who drop out of school	Gaps in data collection and information management systems constrain efforts to analyze evolving needs and track progress.
Data and information on risks are not readily available to REDOs or MoE planning department	EMIS data and other data collection tools do not contain questions or indicators on risks and their impacts on education	Planning for risk reduction is compromised

	districts	
Damage/destruction of education records and archives (e.g. pedagogical and student files)	Not all education facilities have capacities to save data online	Gaps in data collection and information management systems constrain efforts to analyze evolving needs and track progress.
Disruption in data collection process at all levels, and especially at school level	Inaccessibility of crisis-affected areas which makes data collection challenging	Gaps in data collection and information management systems constrain efforts to analyze evolving needs and track progress.
	Use of national data masks the disparities in education across regions and population subgroups (disability, gender, ethnicity...)	
	Lack of emergency budget/ Funds not allocated for emergencies in the budget. Contingency budget line in MoE budget is not sufficient to cover emergency costs	Need to obtain financial support or grants from donors and various other source of private funds, which increases delays in emergency repairs and reconstructions
Budgetary strain, reconstructive works to be done on access ways, drainage and irrigation, river defence		
Costs due to hazard damage need to be covered by MoE	Lack of insurance policy to cover risks within the MoE	Additional budget needs to be mobilized