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**A review of climate change impact on the education of children with
disabilities in early childhood in Eswatini and South Africa.**

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This research proposal is submitted in pursuance of the requirements for the
degree of Masters of Philosophy in Child Care and Protection

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2025

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ACRONYMS

ACRWC	African Charter on the Rights and Welfare of the Child
CDT	Critical Disability Theory
CRC	Committee on the Rights of the Child
UNCRC	United Nations Convention on the Rights of the Child
OVC	Orphans and Vulnerable Children
CERWC	Committee of Experts on the Rights and Welfare of Children
CARE	Cooperative for Assistance and Relief Everywhere
CEED	Centre for Environmental Economics and Development
CRPD	Convention on the Rights of Persons with Disabilities
DICARP	Disability Inclusive Climate Action Research Program
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECE	Early Childhood Education
EFA	Education for All
EPWP	Expanded Public Works Programme
IPCC	Intergovernmental Panel on Climate Change
NDMA	National Disaster Management Agency
NIECDP	National Integrated Early Childhood Development Policy
NGOs	Non-Governmental Organisations
OVC	Orphans and Vulnerable Children
SDGs	Sustainable Development Goals
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation, and Hygiene

ABSTRACT

This study explores the impact of climate change on the education of children with disabilities in early childhood in Eswatini and South Africa, focusing on the exceptional challenges these children encounter and the consequences for practice and policy. Using a comprehensive desktop review, the research analyses international, regional, and national legal policies, conventions, frameworks, and treaties, including the UN Convention on the Rights of the Child and the UN Convention on the Rights of Persons with Disabilities. The study applies Critical Disability Theory to examine systemic barriers and inequities worsened by climate-induced phenomena such as extreme weather conditions, drought, and floods, which disrupt access to education. The findings reveal that children with disabilities are excessively and unequally affected by climate change because of social, economic, and infrastructural challenges, resulting in higher dropout rates, limited access to adaptive technologies, and reduced resilience in education systems. The research emphasises the great need for climate-resilient and inclusive educational policies and interventions that speak to the connection between disability and climate vulnerability. Recommendations include integrating climate change adaptation strategies into early childhood education programmes and prioritising resources for this marginalised group in disaster management frameworks. This dissertation contributes to bridging the knowledge gap on the connecting link between climate change, disability, and early childhood education in developing contexts, emphasising the critical role of rights-based approaches in fostering inclusive, sustainable solutions.

Keywords: climate change, children with disabilities, early childhood education, Critical Disability Theory, inclusive education.

Contents

DECLARATION REGARDING ORIGINALITY	i
ACKNOWLEDGEMENTS	ii
ACRONYMS	iii
ABSTRACT.....	iv
TABLES	v
CHAPTER ONE	1
I INTRODUCTION	1
II BACKGROUND TO THE STUDY	1
III RATIONALE.....	6
IV MOTIVATION	6
V RESEARCH QUESTIONS.....	7
VI RESEARCH METHODOLOGY.....	8
VII THEORETICAL FRAMEWORK.....	8
VIII CHAPTER OUTLINE	10
IX CONCLUDING REMARKS.....	11
CHAPTER TWO.....	12
I INTRODUCTION	12
II INTERNATIONAL AND REGIONAL LAW PERSPECTIVES ON THE RIGHTS OF CHILDREN WITH DISABILITIES.....	12
1 UN Convention on the Rights of the Child (UNCRC) (1989)	12
2 The United Nations Sustainable Development Goals (SDGs)	17
3 UN Convention on the Rights of Persons with Disabilities (CRPD)	17
4 The African Charter on the Rights and Welfare of the African Child (ACRWC)	19
III EARLY CHILDHOOD DEVELOPMENT AS A FUNDAMENTAL RIGHT	19
IV MODELS OF DISABILITY	22
1 Medical Model of Disability	23
2 Social Model of Disability.....	24

3	Human Rights-based Model of Disability.....	25
4	Application of the Disability Models to Early Childhood.....	26
V	AN OVERVIEW OF THE CLIMATE CHANGE CRISIS.....	27
1	Effects on Food Security and Nutritional Vulnerabilities.....	28
2	Key Interventions Promoting Optimal Nutrition in Young Children.....	30
3	Effects on Education	31
4	Effects on Health	33
VI	CONCLUDING REMARKS	35
	CHAPTER THREE	37
I	INTRODUCTION.....	37
II	LEGAL INSTRUMENTS IN ESWATINI.....	38
1	The National Disability Policy	40
2	Eswatini Policies on Children with Disabilities	40
3	The Constitution of the Kingdom of Eswatini 2005.....	41
4	The Children Protection and Welfare Act of 2012	41
5	The Persons with Disabilities Act (2018)	42
6	The National Children's Policy Act (2009)	42
7	Inclusive Education Policy.....	43
8	The National Disaster Management Agency (NDMA).....	43
9	Summary of Findings on the Legislation and Policy of Eswatini	44
III	CLIMATE CHANGE VULNERABILITIES OF CHILDREN WITH DISABILITIES IN ESWATINI	44
1	Physical Disabilities	46
2	Mental Health Impacts.....	47
3	Teacher Training.....	48
IV	LEGAL INSTRUMENTS IN SOUTH AFRICA.....	49
1	The South African Constitution (1996).....	49
2	Children's Act 38 of 2005	50

3	National Integrated Early Childhood Development Policy (NIECDP) 2015	50
4	The Protection and Promotion of Persons with Disabilities Bill.....	51
5	The White Paper on the Rights of Persons with Disabilities (WPRPD) 2015..	52
6	Education White Paper 6 Special Needs Education Building an Inclusive....	52
7	The National Development Plan.....	53
8	National Climate Change Response Policy (NCCRP)	53
9	Climate Change Act 22 of 2024.....	54
V	Climate Change Vulnerabilities of Children with Disabilities, South Africa	54
1	Physical disabilities.....	55
2	Mental Health Impacts.....	57
VI	Comparing Eswatini and South Africa – Opportunities and challenges.....	58
VII	CONCLUDING REMARKS.....	60
	CHAPTER FOUR	61
I	INTRODUCTION	61
II	REVIEW OF THEORETICAL FRAMEWORKS.....	61
III	ADDRESSING THE RESEARCH QUESTIONS	62
IV	NATIONAL EXPERIENCES: ESWATINI AND SOUTH AFRICA.....	64
V	RECOMMENDATIONS.....	65
VI	CONCLUSION.....	66
	BIBLIOGRAPHY	68

Tables

Table 1 Health effects of climate change on developing children..... 34

CHAPTER ONE

THE PROBLEM AND ITS CONTEXT

I INTRODUCTION

Globally, crises connected with pollution, biodiversity loss, and climate change are a threat to the survival of human beings, land, and water species (UNESCO, 2023b). Though universally, states are expected to embrace, adapt, and promote climate change actions, developing countries lack guidance and resources to carry out the actions (UN, 2019). More significantly, climate change as a worldwide issue goes beyond national boundaries, thus, even though its consequences are global, it has a substantial impact on economically, culturally, and socially disadvantaged individuals, including children with disabilities (Adedeji et al. 2014). This situation may result in an increase in human rights violations.

All children must be guaranteed the right to education, as this is an essential human right for all to receive, including children with disabilities, (Convention on the Rights of Persons with Disabilities). There is a shortage of studies on how climate change impacts children's well-being, and development, as well as inadequate policies that highlight the difficulties faced by children with disabilities (Eriksen, Grondahl, & Saebones, 2021). From a human rights standpoint, there has been a long-standing disregard for how climate changes affect the education of children with disabilities (Puthucherril, 2012). Notably, there has not been enough research done on the effects of climate change-induced weather patterns and access to early childhood education and services by vulnerable children in South Africa and Eswatini.

II BACKGROUND TO THE STUDY

Globally, around 25 million children are unable to attend school due to a disability (Graham, 2014). This exclusion is particularly stark in low and middle-income countries, where systems and infrastructure often fall short of meeting the needs of children with disabilities. Internationally, efforts have been made to include disability rights in development agendas

Meanwhile, children who are reported to be attending school in Africa are less than 10% of the total population of children living with disabilities (Chataika, McKensie, Swart, Lyner-Cleophas, et al (2012a: 387). Even those children with disabilities who

manage to attend school face numerous challenges both at home, in school, and within society as a whole (Guillemot & Burgess, 2014).

Access to education is critical for the welfare, safety, and growth of all children, including those with disabilities. However, in Sub-Saharan Africa, children with disabilities are often excluded and marginalised, despite their fundamental right to attend school (Dube et al, 2021). Though to some extent progress has been made, in recent years, the educational outcomes of children with disabilities remain behind when compared to their non-disabled peers (Hui et al., 2018; Male & Wodon, 2017).

As of September 2014, the prevalence rate for disability in South Africa was 7,5% (Statistics South Africa, 2014), and the disability prevalence by age for 5-year-olds to 9-year-olds, as per the South African census 2011 figures, stood at 10.5% of the children in that age range. However, a cautionary statement was included in the report, noting how parents had misrepresented facts about children by classifying them as either 'unable to do' or 'having' a lot of difficulties performing certain roles' when in reality this was an aspect that could be attributed an individual child's level of development rather than an impairment (Statistics South Africa, 2014).

Nonetheless, individuals with severe disabilities still face challenges in accessing education and opportunities for employment. Additionally, households that are led by persons with disabilities have been found to have reduced access to basic services compared to those led by individuals without disabilities (Statistics South Africa, 2014)

Many developing countries face significant challenges in providing quality education to their populations, which is exacerbated by climate change-induced weather patterns (Eisenga, 2019). Numerous regions across the globe are grappling with a range of climate-related challenges, such as extreme droughts, floods, air pollution, and water scarcity (Hopper, 2018). These issues have left many children at risk of malnutrition and illness. Nearly every child on planet Earth faces some form of environmental and climatic hazard. Little and Cocklin (2010) succinctly put it that children with disabilities are affected negatively by climate change, including lack of necessities like clean water, sanitation, and healthcare. This is a serious issue that puts their health, education, and overall well-being at risk. It is a disaster that threatens their survival, development, and prospects (ibid).

Extreme weather conditions can destroy schools, while climate-related effects on nutrition, physical, and mental health can affect children's ability to study (Degener, 2017). Thus, the loss of family income and livelihoods due to climate stress can force the abandonment of children with disabilities, leading to negative coping mechanisms. For instance, Human Rights Watch discovered that families with children with disabilities frequently experienced climate-related shocks like river erosion, crop loss, or cyclones, (Watch, Human & Myanmar, Myo, 2023).

There is a consensus among social scientists that children with disabilities are among the most vulnerable populations impacted by climate change (Kett et al., 2021; DICARP, 2022). Due to their disabilities and social exclusion, they are particularly susceptible. Notably, many children with disabilities who may come from less wealthy backgrounds and many times have fewer resources to survive the impacts of climate change, (DICARP, 2022; United Nations, 2018). Even though a lot has been published on the adverse effects of global warming on impoverished communities, little attention has been given to evaluating and ensuring access to school for children with disabilities who are more at risk within these groups (Lewis & Ballard, 2012).

It is a concern that in many underdeveloped nations, children with disabilities are forced to live under exclusionary conditions (Choy, 2009). They face difficult situations and are extremely predisposed as they live in communities that expose them to harmful ideas, attitudes, labels, humiliation, and stigma. Disability is a significant cause of exclusion from school for these young people, (Borger, 2007). However, having an impairment should not be used to categorise children with disabilities as long as the barriers caused by the disability are addressed. Bines and Lei (2011) observed that addressing the difficulties these children experience is crucial, and they should be provided with adequate support to help them overcome these obstacles.

According to UNESCO (2010), disability is recognised as a significant factor contributing to the global educational marginalisation of children. Degener (2017) agrees that access to early childhood education remains a critical policy issue, particularly in light of the significant proportion of children with disabilities who do not attend school. Both the government and non-state actors who prioritise education access, children's rights, and protecting children from discrimination and social exclusion find significant value in research on the environmental factors that affect the access to early childhood education services for children with disabilities (ibid).

Considering a comparative perspective, it is noteworthy that the German government is devoted to safeguarding the interests of children with disabilities in development cooperation policy and all related projects (German Watch, 2018). This principle governs assessment, planning, execution, and evaluation, including financing for climate change adaptation, disaster risk reduction, and resilience-building projects incorporating children with disabilities (Brauch, 2002).

Children in the United States of America are using the legal system to assert their rights and demand a safe environment. In the case of *Juliana et al. v. United States of America et al.*, a group of 21 plaintiffs aged 8 to 20 and on behalf of 'future generations' sued the US Federal Government for its failure to adequately address climate change, which they believe violates their life, liberty, and property rights as guaranteed by the Constitution, (World Bank, 2015; Meyer & Gravet, 2020). In December 2024, the Supreme Court denied the child plaintiffs' petition for an order to review an appeals court's decision to dismiss the complaint filed by the plaintiffs. That matter is still pending further review. Similarly, around the globe, incidents involving children are being investigated, for instance, one such complaint was filed under the Optional Protocol for a Communications Procedure with the United Nations Committee on the Rights of the Child, (OHCHR, 2011).

Individuals with disabilities are often marginalised worldwide, facing prejudice, poverty, stigma, and limited access to public assistance to remedy rights violations (Ngwena, 2006). A study by Lang and Charowa (2008) revealed that the present government (Zimbabwe) recognises that people with disabilities are key partners in national development and service delivery, as evidenced by policies and programmes dealing with a disability. This indicates a need to understand that disability, in all its forms, breeds prejudice, marginalisation, and discrimination, and Zimbabwe is no exception. It is, however, noted that vulnerable groups, particularly children with disabilities, experience even greater and more severe violations of their rights, including their fundamental right to education (Kayess & French, 2008).

Although children with disabilities are particularly vulnerable, there have been very few studies on the short, medium, and long-term effects of climate change on the development and well-being of children in Southern Africa, (Roman & Hall, 2011). In South Africa, children with disabilities face significant challenges due to high levels of poverty, disparity, and susceptibility on the effects of climate change has profound

impacts on rural areas where there is limited access to healthcare, food, shelter, water, food, and education (Polser, 2010; Clarke, 2023). This has important ramifications for children's development. In South Africa, Black African children experience the highest levels of multidimensional poverty, with 68.3% affected, compared to children from other population groups. This form of poverty is particularly widespread among double orphans (77.3%) and paternal orphans (75.0%), whereas it is less prevalent among non-orphans and maternal orphans, (Statistics South Africa, 2021). Sanders, Bradshaw, and Ngongo, (2010) opine that national, regional, and local climate change policies and initiatives frequently overlook children with disabilities, in South Africa.

The South African Climate Change Bill (2021) emphasised that a healthy society anchored on a strong economy is dependent on the benefits derived from a well-functioning environment with proper systems in place to guard the interests of all members of the society. It further highlighted that improving the sustainability of economic, social, and ecological services is a crucial part of an efficient and effective climate change response mechanism. The SA Climate Change Bill's evaluation of climate change needs and responses (2021) outlined that provinces and municipalities should conduct spatial mapping within their respective jurisdictions, whether at the provincial, district, or metropolitan level to identify risks, and vulnerabilities for areas that are susceptible to the effects of climate change (South Africa Climate Change Bill, 2021). Aside from this aspect, there was no specific recognition of the plight of the children. These policies therefore fail to recognise these children's specific needs and vulnerabilities, as well as their potential to act as grassroots change agents (Kett, Sriskanthan, & Cole, (2021). As a result, children with disabilities in South Africa remain invisible in their fight against the impact of climate change.

Eswatini experiences recurring disasters, especially drought which affects the larger population, principally the more vulnerable groups, namely children with disabilities (CEED, 2022/2023). While many disaster relief approaches focus on environmental preservation, climate change mitigation, and disaster management, none explicitly address the accessibility of schools for children with disabilities (Belle & Hlalele, 2015). The Kingdom of Eswatini made headlines during the 2015-2016 El Niño phenomenon (UNICEF, 2017). The experience, coupled with record-high temperatures, led to the worst drought the region had experienced in 50 years (NDMA, 2015). In recent years, Eswatini has been experiencing a variety of effects caused by

climate change. In 2021, Cyclone Eloise caused massive flooding that resulted in significant damage to physical infrastructure and utility networks, loss of livelihoods, and environmental degradation (UNICEF, 2023). Similarly, highly populated metropolitan areas that are more vulnerable to climatic shocks, resulted in rural family heads being denied access to land and other household assets.

Climate change further exacerbates these risks and predisposition characteristics, especially impacting those who are already disproportionately susceptible, such as orphans, vulnerable children (OVC), and children with impairments (Kamara et al, 2019). The difficulties that children with disabilities encounter while attempting to access early childhood education services are not much different from regional situations (CARE International, 2009). Despite the disadvantages, there is a rising concern about the fact that children with disabilities experience more problems and challenges than their peers without disabilities. They frequently have restricted or impaired access to amenities and essential rights, including healthcare and education.

Notably, indispensable services for children with disabilities are not considered part of national plans of development, rather, they are largely viewed as charity and provided for by non-governmental organisations, social welfare, and other sympathisers, (UNICEF/ESARO, 2020). Children with disabilities are therefore caught in very difficult situations; hence, this study explores and will analyse their situations in Eswatini, particularly in the Manzini Region and in South Africa.

III RATIONALE

Children with disabilities are particularly vulnerable during climate disasters and emergencies, and they are more exposed to the impact of climate change compared to other children (Moran et al., 2017; UNICEF, 2022). These children with disabilities may also be more severely affected by the collapse of vital services, such as healthcare, which exacerbates problems for them to exercise their rights (Tonne & Adamson, 2020). It has been noted that people with disabilities, particularly children, are frequently ignored and overlooked in climate research (Moran et al., 2017).

Although there has been research on how disadvantaged populations are affected by climate change, there is still a lack of specificity on the needs of individuals within these groups, including disabled children (Lewis & Ballard, 2012). Research on

climate change, children's rights, and the right to education for children with disabilities exists, but it has not been thoroughly examined when these three aspects are combined, (Peek & Stough, 2010). Studies on the impact of climate change on the early childhood education of children with disabilities have also been underexplored (Sanders et al., 2018).

The rationale of this study was to highlight and elaborate on the potential effects of climate change in this region of the world, which is changing at one of the fastest rates. The study focused on how climate change might impact children with disabilities' access to school, especially their right to an education, because of how serious the implications could be. Further research is necessary, and this current study aims to contribute to a better understanding and address some of the existing gaps. The study seeks to develop an intervention framework proposal to mitigate climate change in the education of children with disabilities in early childhood.

IV MOTIVATION

Climate change has worsened the problems for children with disabilities who find it very difficult to move around during floods without additional help. This leads to these children being excluded even from programmes that give them social assistance, such as food and health services. As an early childhood educator, the researcher has observed the insurmountable challenges faced by children with disabilities when it comes to accessing early childhood services, particularly concerning climate change weather-induced patterns in Eswatini. In 2022, a hailstorm accompanied by powerful winds and hailstones struck rural settlements in the Shiselweni area. Numerous homes experienced the loss of essential items like food, clothes, shelter, paperwork, and school supplies. One persistent issue was that some children who had to cross the rivers to go to school failed when the rivers flooded and damaged the infrastructure leading to the schools. In South Africa, the researcher was motivated by the fact that the country is also vulnerable to climatic shocks and is in the process of incorporating the CRPD principles in its domestic laws through the Persons with Disabilities Bill.

V RESEARCH QUESTIONS

To address the research problem and provide guidelines for the study, the main question, *'What is the climate change impact on the education of children with disabilities in early childhood in Eswatini and South Africa?'* must be answered through

the following sub-questions:

1. What is the impact of climate change on the education of children with disabilities in early childhood globally?
2. What is the impact of climate change on the education of children with disabilities in early childhood in Eswatini and South Africa?
3. How can mechanisms and interventions that have been suggested to mitigate climate change in the education of these children be applied in the context of Eswatini and South Africa?

VI RESEARCH METHODOLOGY

This study is a desktop review of pertinent primary and secondary materials. First, I explored scholarly sources to gain theoretical knowledge and the connection between climate change and human rights. Then, once I had identified the relevant theories, I analysed the current contextual situation in the research area using data sets from international organisations such as the World Food Programme, the World Bank, and the World Meteorological Organisation.

To explain the legal foundation for safeguarding children's rights, I studied the international conventions that were negotiated at the United Nations and the African Union, which identified the state obligations of South Africa and Eswatini. The 1989 United Nations Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities (CRPD), as well as national legislation, policies, and case law such as the African Charter on the Rights and Welfare of the Child (ACRWC), were utilised as primary sources. Secondary sources, such as books, journal articles, and relevant electronic sites, were also cited. The literature review spanning the past decade utilised academic databases including ERIC, JSTOR, Academic Search Premier, Africa-Wide Information, Environment Index, and Education Full-Text. The evaluation identified relevant research by employing key phrases such as early childhood, children with disabilities, and climate change.

VII THEORETICAL FRAMEWORK

Critical Disability Theory encompasses a wide range of theoretical orientations. According to Vehmas and Watson (2014), it analyses disability as a culturally, historically, relatively, socially, and politically constructed phenomenon. Proponents of

this theory focus on activism and advocacy rather than confining themselves to academia. Additionally, Minich (2016) notes that critical disability theory aims to change the circumstances in which oppressed people live through intersectional analysis and a focus on lived experiences. Notably, the critical disability theory encompasses a range of ideas, including some from philosophy. Critical disability theorists prioritise activism over academic confinement, consequently producing knowledge in favour of justice for persons with stigmatised bodies and minds (Schalk, 2017).

Critical disability scholars have identified the dire need for disability-inclusive climate research (Jodoin et al, 2023), explaining why this is needed:

It is crucial to employ community-engaged research methodologies that incorporate climate justice and critical disability theory to promote disability justice. Understanding and addressing the unique impacts of climate change on people with disabilities can help reduce marginalisation and inaccessibility, while also improving climate governance and disaster preparedness, response, and recovery for everyone, not just those with disabilities. Therefore, scholars play a vital role in advancing disability-inclusive climate resilience, (Petrie-Flom Centre Staff, 2023).

Critical disability theory stresses how disability is influenced by societal systems and attitudes of the masses in comparison with individual disabilities (Stein & Stein, 2022). Thus, it becomes essential to consider this perspective when analysing and investigating the unequal effects of climate change on vulnerable and at-risk groups such as children with disabilities, (Stein et al., 2023). In the context of the current review study, Critical disability theory offers a significant lens for understanding and examining the relationship existing between disability and climate change, especially for young children with disabilities. By highlighting systemic barriers and advocating for inclusive strategies, we can significantly improve our ability to support this vulnerable population in adapting to the challenges presented by a changing environment. To safeguard and ensure that the needs of children with disabilities are catered for, in an increasingly unpredictable environment, tackling these challenges demands a collaborative approach that prioritises the voices and experiences of these children. Sanders et al., (2018), further argue that children with disabilities may recognise the negative social signals in their educational environments, and the effect on their academic achievement and general welfare is huge, (Hunt, 2023).

In this regard, the nexus of critical disability theory, climate change, and the experiences of young children with disabilities, makes it pertinent to implement inclusive practices and policies that will effectively address their particular

vulnerabilities.

VIII CHAPTER OUTLINE

The structure of the complete study is arranged in the form of five chapters, which include the introductory chapter

CHAPTER 1

This first chapter defines and contextualises the phenomenon of climate change's impact on the education of children with disabilities in early childhood in Eswatini and South Africa. The chapter provides a detailed outline of the purpose, background, and rationale, along with three research questions guiding the study. The presentation includes operational definitions and essential concepts, as well as a justification of the research methodology and theoretical framework.

CHAPTER 2

This chapter begins by laying out the research's theoretical dimensions and then examines the global impact of climate change on children with disabilities in early childhood.

CHAPTER 3

The third chapter focuses on comparing the effects of climate change on children with disabilities in Eswatini and South Africa, with particular focus to the policy and legislation frameworks designed to support and address climate change challenges for this group. It also identifies and critically analyses the mechanisms and interventions to mitigate climate change for children with disabilities in early childhood education and its contextual application to Eswatini and South Africa.

CHAPTER 4

The last chapter connects the several theoretical and review threads to present a comprehensive study overview and provides recommendations for future implementations.

IX CONCLUDING REMARKS

One of the utmost crucial worldwide concerns of the day is climate change and its consequences, which are already affecting many people in all regions of the globe. Despite its far-reaching effects, climate change is predicted to have the most damaging effects on people who are socially, culturally, and economically marginalised. The education of children with disabilities and climate change are two closely related concepts, particularly when it comes to building resilient communities that can support and guarantee the well-being of children in this ever-changing environment.

CHAPTER TWO

A GLOBAL PERSPECTIVE ON CHILDREN WITH DISABILITIES, EDUCATION & EARLY CHILDHOOD EDUCATION AND CLIMATE CHANGE

I INTRODUCTION

Global warming is a problem that is affecting every part of the world and has already caused irreversible consequences. Most underprivileged societies and countries depend mainly on natural resources and struggle to adapt to changing environmental conditions. Children with disabilities are often the most marginalised individuals in these disadvantaged communities as they face psychological, physical, and communicative barriers, restricting their levels of access to opportunities and services that promote their well-being and resilience (Hart et al, 2014).

The negative effects of climate change are more noticeable in severely semi-developed nations and impoverished people who heavily depend on natural resources without the coping mechanisms or adaptive skills to adjust to a changing environment. This is further worsened by the fact that the most marginalised group in these countries are children living with disabilities. This section seeks to contextualise the study within the framework of a global perspective of people living with disabilities and climate change as follows: First, a discussion of international law perspectives on children is presented. Next, the relevant models of disability are explained. Third, the impact of climate change on children living with disabilities is identified, followed by a conclusion.

II INTERNATIONAL AND REGIONAL LAW PERSPECTIVES ON THE RIGHTS OF CHILDREN WITH DISABILITIES

1 UN Convention on the Rights of the Child (UNCRC) (1989)

The UNCRC was approved, adopted and accepted in 1989 to guarantee and act as a promise of children's equal rights globally by governments and it transformed the way in which the world perceived and treated children, marking a departure from charity to rights entitlement as children are formally recognised as the rights bearers. According to the ACPF (2014), the first legally binding tool at international level was the UNCRC as it stood to hold states accountable for realising children's rights. Additionally,

Rishmawi (2016) stated the UNCRC gives a communal and clear definition of children's political, cultural, civil, economic, and social rights as well as advocating for children to full development potential. In propagating equality, equity, and inclusion, ACPF (2014) proposed that, while the UNCRC directly addresses issues of children with disabilities in some areas, it should be emphasised that any right established that refers to a 'child' also refers to and applies to children living with disabilities.

In this light, the UNCRC is based on the principle that every child can develop to the fullest extent possible and should have all the resources necessary to prepare them for maturity (Philpott, 2013). In addition, ACPF (2014), stresses how the UNCRC focuses on the fact that, while approaching adulthood, children should be viewed and treated as rights bearers, rather than as parents or passive receivers of charity. These lines of thought imply that the survival of every child is guaranteed and their well-being is ensured worldwide if countries adopt such international frameworks and statutes. This also includes the protection of all children, including those living with disabilities, against the adverse impacts of climate change, which poses a threat to their education, cognitive development, and well-being.

In this regard, the UNCRC becomes the most ratified human rights treaty in the world as it provides a comprehensive and expansive proclamation of rights concerning children and their education. Its impact has changed how children experience education in the member nations (UNICEF, 2014). Nonetheless, an observation by Smith (2007), Mohammed (2013), and Mangamu (2013) revealed that enacting laws protecting children's rights does not always guarantee that they will be abided by. For instance, the authors reported that though the rights are enshrined in the UNCRC, implementation is still a challenge in New Zealand, Zambia, Iraq, and many other countries. In a similar vein, Vasabhai et al. (2014) discovered how in India the rights of children are also desecrated, while Mhaka-Mutepfa, Maree, and Chiganga (2014) reported on how in Zimbabwe the same rights were not being well implemented as expected. However, Reinhold found in an empirical study on child mortality and vaccination rates that adoption of the CRC had positive effects on these indicators. In particular, Reinhold posits that the "effectiveness of adoption of core human rights treaties in promoting the right to health in less developed countries".

Merey (2014) puts forth an argument that a globally enforceable agreement is necessary to safeguard children from neglect and abuse and ensure their well-being.

The International Declaration of Human Rights under Item 2 of Article 25, stipulates the significance of childhood and the need to guarantee the protection of children and their safeguarding from harm (United Nations General Assembly, 1948 & UNICEF, 2015). The right to receive particular care without discrimination is embraced in the UNCRC (UNICEF, 1989).

The General Comment on article No. 26 (CRC) explains how articles 28 and 29 should be interpreted with education and environmental rights. While Article 28 focuses on children's rights to education, Article 29 further complements it by focusing on how education must foster respect for the natural environment. These two articles combined can provide an anchor for a child rights-focused approach to tackling challenges related to the environment. However, the right to education is mainly at risk due to climate-induced shocks or disasters, as they can lead to school closures, interruptions in learning, destruction of educational infrastructure, or even dropouts.

The CRC also emphasises the need for education to be transformative by including environmental issues in the curriculum, something which has been done by South Africa and Eswatini. Curricula should be custom-made to match the cultural and environmental contexts children live in order to foster a greater understanding of how the environment affects children's issues, as indicated in Article 29. Furthermore, the committee also underscores the importance of continuity in education through the creation of safe, healthy, and resilient learning environments. In light of this, states are expecting infrastructure that protects children from environmental hazards like flooding. Therefore, states are also expected to prioritise vulnerable and underserved communities in all efforts to climate-proof the education systems, especially for persons with disabilities, as the committee additionally notes the disproportionate impact of climate change on the education of children, particularly in marginalised communities. Overall, the committee calls on states to integrate environmental considerations into their educational policies and practices.

The CRC further in General Comment 26 identified states' parties' obligation to make environmental information available to families, caregivers, and children. In particular, the committee also clarified that:

"34. States have an obligation to make environmental information available. Dissemination methods should be appropriate to children's ages and capacities and aimed at overcoming obstacles, such as illiteracy, disability, language barriers, distance, and limited access to

information and communications technology. States should encourage the media to disseminate accurate information and materials regarding the environment, for example, measures that children and their families can take to manage risks in the context of climate change-related disasters. Information should therefore be made available in accessible formats to children with disabilities. Specifically, the Committee also explains in its General Comment 26 that the CRC requires state parties to observe their obligations to children under articles 28 and 29 on the right to education as follows;

“52. Article 29 (1) (e) of the Convention, requiring that the education of a child be directed to the development of respect for the natural environment, should be read in conjunction with Article 28, to ensure that every child has the right to receive an education that reflects environmental values.”

“53. A rights-based environmental education should be transformative, inclusive, child-centred, child-friendly, and empowering. It should pursue the development of the child’s personality, talents, and abilities, acknowledge the close interrelationship between respect for the natural environment and other ethical values enshrined in Article 29 (1) of the Convention, and have both a local and global orientation.”

“54. Environmental values should be reflected in the education and training of all professionals involved in education, encompassing teaching methods, technologies, and approaches used in education, school environments, and preparing children for green jobs.”

General Comment 26 of the CRC gives specific interpretive guidelines on how state parties should guarantee children’s education rights, linking them to a healthy and clean environment. Regarding children’s education rights, the General Comment explains:

“51. Education is one of the cornerstones of a child rights-based approach to the environment. Children have highlighted that education is instrumental in protecting their rights and the environment and in increasing their awareness and preparedness for environmental damage; however, the right to education is highly vulnerable to the impact of environmental harm, as it can result in school closures and disruptions, school dropout and the destruction of schools and places to play.”

Concerning the rights to a sustainable, healthy, and clean environment, the CRC in General Comment 26 articulated states’ obligations as follows: “63. Children have the right to a clean, healthy, and sustainable environment. This right is implicit in the Convention and directly linked to, in particular, the rights to life, survival, and development, under Article 6, to the highest attainable standard of health, including taking into consideration the dangers and risks of environmental pollution, under Article 24, to an adequate standard of living, under article 27, and to education, under article 28, including the development of respect for the natural environment, under article 29”.

“64. The substantive elements of this right are profoundly important for children, given that they include clean air, a safe and stable climate, healthy ecosystems and biodiversity, safe and sufficient water, healthy and sustainable food, and non-toxic environments.”

“65. Towards the realisation of this right for children, the Committee considers that States should immediately take the following action: (a) Improve air quality, by reducing both outdoor and household air pollution, to prevent child mortality, especially among children under 5 years of age; (b) Ensure access to safe and sufficient water and sanitation and healthy aquatic ecosystems to prevent the spread of waterborne illnesses among children; (c) Transform industrial agriculture and fisheries to produce healthy and sustainable food aimed at preventing malnutrition and promoting children’s growth and development.”

“(d) Equitably phase out the use of coal, oil, and natural gas, ensure a fair and just transition of energy sources and invest in renewable energy, energy storage, and energy efficiency to address the climate crisis; (e) Conserve, protect and restore biodiversity; (f) Prevent marine pollution, by banning the direct or indirect introduction of substances into the marine environment that are hazardous to children’s health and marine (g) Closely regulate and eliminate, as appropriate, the production, sale, use and release of toxic substances that have disproportionate adverse health effects on children, in particular those substances that are developmental neurotoxins.”

“66. Procedural elements, including access to information, participation in decision- making and child-friendly access to justice, with effective remedies, have equal importance to the empowerment of children, including through education, to become agents of their own destiny.”

“67. States should incorporate children’s right to a clean, healthy, and sustainable environment into their national legislation and take adequate measures to implement it in order to strengthen accountability. This right should be mainstreamed across all decisions and measures concerning children, including policies related to education, leisure, play, access to green spaces, child protection, children’s health and migration, and national frameworks for the implementation of the Convention.”

Interestingly, while the General Comment gives guidance for measures about the environment and the education of children, it specifically does not refer to children in the early childhood phase. The Committee of the Rights of the Child in General Comment 26 (2022: para 53), does, however, emphasise that;

“[a]ll children should be equipped with the skills necessary to face expected environmental challenges in life, such as disaster risks and environment-related health impacts, including the ability to critically reflect upon such challenges, solve problems, make well-balanced decisions and assume environmental responsibility, such as through sustainable lifestyles and consumption, following their evolving capacities.”

By definition, the reference in the comment to “all” children include young children in the early education phase. Governments are therefore obligated to ensure that children, including those in the early childhood phase, are taught the skills to adapt to environmental changes and impacts. The General Comment (2022: para 71) further explains the kinds of measures that state parties must take to safeguard children’s environmental rights:

“71. States must take deliberate, specific, and targeted steps toward achieving the full and effective enjoyment of children’s rights related to the environment, including their right to a healthy environment, through the development of legislation, policies, strategies, or plans that are science-based and consistent with relevant international guidelines related to

environmental health and safety and by refraining from taking retrogressive measures that are less protective of children.”

2 The United Nations Sustainable Development Goals (SDGS)

The United Nations launched the Sustainable Development Goals in 2015, and in 2016, Eswatini adopted them as a standard model to benchmark the country's progress through Agenda 2030 and African Union Agenda 2063 (Government of Eswatini, 2019). It is noted that from the 169 indicators, 35 are directly related to children, including children with disabilities (ibid). As a country, Eswatini is entirely committed to the SDG agenda, however, more focus has been shifted to goals 1 to 8 (fighting poverty, addressing food insecurity, ensuring health, inclusive education water and energy availability and affordability, and economic growth and work-related goals), 13 (to combat climate change and its impact), and 16 (peace and justice), (UNICEF Data, 2020). Significant progress has been noted in creating an enabling and conducive environment to achieving these goals through revisiting the National Development Strategy (Vision 2022) to address global as well as regional issues. Though Eswatini has complied with Sustainable Development Conventions, including the Paris Agreement and Sendai Framework for Disaster Risk Reduction, it is not enough to simply create ecosystems of empowering policies that are insufficient to meet goals in reality (SITAN, 2019).

3 UN Convention On the Rights of Persons with Disabilities

The CRPD was the first international human rights treaty of the third millennium that recognises the existence of discrimination and abuse of children and adults who are disabled and henceforth seeks the promotion and protection of their rights and inherent dignity (UNCRPD, 2008). Therefore, States are to assume this obligation to protect and promote the human rights and essential freedoms of persons living with disabilities. Regarding ACPF (2014), the CRPD seeks to strengthen the provisions highlighted by the CRC framework and provide for the cultural, economic, social, political and civil rights of people living with disabilities. Stein and Lord (2008) postulated that the primary goal of the CPRD is to clarify in what way the existing human rights commitments specifically apply to individuals with disabilities, rather than establishing new rights for them. Thus, the convention aims to change society's perceptions towards people living with disabilities to be viewed not as recipients of

charity or social welfare but as equal and fully participating members of society.

The Committee on the Rights of Persons with Disabilities was established to monitor and control the execution of the CRPD, reviewing submitted reports from State parties as well as reviewing the implementations to significantly improve existing international human rights (Advocate toolkit of CRPD, 2008). Philpott (2013) posited that the CRPD also seeks to ensure that the comprehension of the rights of children with disabilities is not restricted to the provision of services related to disability, but rather goes further to embrace the implementation of measures that can change the perceived views, practices, and attitudes stigmatising people with disabilities.

In relation to children with disabilities, the main guiding principle of the CRPD is equality and non-discrimination (Schulse, 2010). Lawson (2007) states that the rights of equality and non-discrimination for people with disabilities are expressed by the CRPD in three interrelated rudiments. Primarily, according to Article 12 (2), there is legal capacity possession that qualifies the acknowledgment of disabled persons as right bearers with responsibilities and thus entitled to their rights being protected and not as charity cases. Secondly, Article 12 (4) obliges State signatories to take necessary measures to ensure that disabled people are guaranteed access to the necessary support that gives them equality, values of dignity, and autonomy. Thirdly, the CRPD advocates for equal entitlement to the law and its full protection benefits (Philpott, 2013).

The CRPD prohibits discrimination on the grounds of disability and inequality, just like the CRC. Article 5 (3) advocates for the accessibility of reasonable accommodation by persons with disability. This obligation seeks to eliminate discrimination and promote equality; the failure to do so may be viewed as discrimination and thus obliges party States to undertake reasonable steps and measures toward making these provisions. Lawson (2007) cited in Philpott (2013) noted that this can be construed as imposing an affirmative responsibility for States parties to find and rectify obstacles that hinder disabled persons from fully enjoying their rights.

Interestingly, almost all of the UN's member states have signed the Convention on the Rights of Persons with Disabilities (CRPD).

4 The African Charter On the Rights and Welfare of the African Child (ACRWC)

The ACRWC, with particular reference to the African child, outlines the state's commitments to children's rights and responsibilities (UNICEF, 2015). The African Committee of Experts on the Rights and Welfare of Children (ACERWC) issued a resolution in 2022 on child rights and climate change, for the full integration of a child rights-based approach into climate change action (ACERWC, 2022). That resolution, amongst others, calls for states to

“Incorporate a child-rights-based approach to climate action, ensuring that the specific risks faced by children are taken into account in the development and implementation of climate policies and programmes, paying particular attention to the needs of those children who are most vulnerable to the effects of climate change, such as girls, indigenous groups and children with disabilities” (para I). Furthermore, the resolution demands participant states to ensure that “actions taken to counteract the impacts of climate change uphold the rights of children anchored in the ACRWC, including the best interests of the child” (para II). In terms of actions to be taken, the resolution calls for countries to

“Undertake all the necessary legislative, policy, administrative, and institutional measures to address the effects of climate change on children's rights, particularly in critical sectors such as food and nutrition, water, sanitation, education, and social protection.” (para III).

Clearly, the resolution emphasises the consideration of disabled children's needs to be recognised and acknowledged when states craft and implement programmes and policies related to climate change, as they are vulnerable to related risks. Further, the resolution emphasises that the rights of children, including their best interests, must be actioned to alleviate the impact of climate change on their daily lives. The sectors of food security, sanitation and water, education, and social protection (which arguably includes social security), are prioritised as areas for legislative and other mechanisms to deal with climate change's impact on children's rights. Those areas have a significant role to play in the lives of children in the early years, including early childhood education.

III EARLY CHILDHOOD DEVELOPMENT AS A FUNDAMENTAL RIGHT

Britto and Sherr (2016) highlight the increasing recognition of early childhood as a crucial period for fostering sustainable societies within global development frameworks. High-quality ECE emphasised programmes are acknowledged for their positive impact on children, families, and broader societal outcomes. All children have

an inherent right to access opportunities and services that support their growth during these formative years. In this regard, Mailwane (2016) emphasises that children need ECE facilities tailored to their developmental needs, rather than solely as preparation for adulthood. Similarly, Mendis (2006) underscores the distinct right of all young children to early childhood education and access to Early Childhood Development Centres. Bruwer (2014) agrees, adding that denying ECE to children living with disabilities is equivalent to negating many other rights enjoyed by their counterparts without impairments. For example, their rights to play and develop in their early years, as well as the enjoyment of childhood, may prevent them from attaining their maximum developmental potential if denied.

As indicated earlier, the CRC and the CRPD highlight very important matters concerning disabled children's rights (UNICEF, 2012). These range from safeguarding against abuse, neglect, and violence to access to fundamental and necessary care services like social inclusion, education, nutrition, health care, and early childhood intervention. Preserving children's rights on the above-listed issues may have a strong influence on giving them a happy upbringing, which can pave the way for their eventual and meaningful participation in society as adults. Levy, Messner, and Wertlie (2014) argue that international law explicitly states that children with disabilities have a right to a dignified existence, allowing them to actively and fully participate in societal engagements, particularly those related to education; it is their fundamental right to also enjoy the rights.

According to Voorhis et al. (2013), the majority of parents who have had access to education tend to prepare their children for school, whereas parents who were not exposed to education as children do the opposite. This is because most children's development starts in the family and is primarily dependent on their parents. The lack of school readiness makes it problematic for children to fully adapt to school and usually drop out. ECE is a necessary area of intervention for the success of primary education and life-long/further learning (Ministry of Primary and Mass Education [Bangladesh], 2008).

Children's success in the future and their ability to reach their maximum potential is largely influenced by experiences in the early years, Hepburn (2004). In line of argument, the Early Education for All (EFA), a global movement led by UNESCO with the aim to provide education for all, goes on to call for improvement

and extension of ECE services for all children, while mainly focusing on the marginalised and most vulnerable children in society. This call to focus on the marginalised and vulnerable is also in line with CRC and the core principles of equity and inclusion. Consistent with this view, Philpott (2013) is of the view that all states indebted to give support to people whose rights are not undermined and not understood and should take appropriate measures to protect them from discrimination and stigmatisation.

States are mandated to support the rights of people who are marginalised and not understood, and are also called upon to protect them from discrimination, vulnerability, and any form of stigmatisation (Philpott, 2013). In this regard, the group considered to be the most vulnerable are persons with disabilities. An interpretation of international law advanced by Fredman et al (2022), puts forward that education rights can be extended to early childhood education. The authors analysed various treaty provisions, including the CRC and CRPD, and the soft law of treaty monitoring bodies, and concluded that despite the lack of explicit mention in these documents, the rights to education can be understood to encompass Early Childhood Care and Education (ECCE). In support of this perspective, Fredman et al (2022) assert that governments have the responsibility to ensure the affordability, inclusivity, and high quality of ECCE services with adequate and sufficient resources allocated for smooth implementation.

Next, a brief outline of the right to ECCD in Eswatini and South Africa is provided. A more detailed analysis of the legislative and policy provisions for both countries follows in Chapter 3.

The government of Eswatini acknowledges education as a fundamental human right, affirming that every child in the country is entitled to free education in public schools (2009). Consequently, stakeholders are increasingly aware of the importance of education and its vital role in enhancing the lives of children both now and for generations to come (Bischoff & Botha, 2015). Article 29 (6) of the Constitution of the Kingdom of Eswatini recognises education as a fundamental human right, affirming that every child is entitled to free education in public schools (2009). Consequently, all the stakeholders are becoming increasingly aware of the importance of education and the crucial role it plays in enhancing children's lives for both the present and future generations.

However, research has revealed that though ECCD is an integral part of the

education and development of the child, it is not widely accessible or affordable to most families and children in Eswatini (Government of Swaziland, 2009). This is so despite the observation by Hagser and Sandberg (2017) that the children's early years are the most critical to introducing education for sustainable development. This is especially pertinent to the extent that the world is characterised by instability, complexity, rapid change, and high inequality (IPCC, 2007 and Jafino et al., 2020), with additional issues like resource depletion, climate change, unsustainable consumption, and biodiversity loss. Whilst education benefits the individual child, it also serves as a vital instrument for the development and empowerment of the child. Young children with disabilities have rights to education, social security, family, income maintenance, and personal integrity regardless of any eventualities such as weather-induced challenges.

In South Africa, the Constitution of the Republic of South Africa, 1996, and the Children's Act 38 of 2005 are two samples of legal documents that uphold the right to education. The Bill of Rights of the South African Constitution endorses the right to basic education (section 29 of the Constitution). Notably, this is projected to uphold the democratic principles of equality, freedom, as well as values of human dignity (National Government of South Africa, 2010). In order to guarantee that children have the chance to develop healthily, the rights-based argument goes one step further and proposes that any initiative that promotes the right to development should embrace all stages from conception until the age of eight. The recent Children's Amendment Bill (B18-2020) also guarantees several children's rights in accordance with the South African Constitution, as it specifies the provision of early childhood development programmes to children with disabilities.

IV MODELS OF DISABILITY

Disability exists in all races, ethnicities, genders, sexual orientations, ages, and religions as it is affected by how people perceive societal issues and how they live. Disability models are frameworks used to understand disability. These models provide insight into why some attitudes and prejudices occur and ways in which they are perpetuated in society (Sullivan, 2011). The main models in the context of this study are: medical, social, and human rights. However, many scholarly debates on the different approaches to disability have resulted in a focus shot from the medical to the social and lastly the human rights model. It is important to state that although there

have been shifts, each of these models do address the perceived sources of disability and whiles providing appropriate responses and meaning to every aspect.

1 Medical Model of Disability

When medical professionalism began to emerge in the 19th and 20th centuries, the medical or individual model predominated, states Medley and Michelle (2009), and accordingly, this model defines disability by the medical condition of the person. According to this paradigm, an individual's medical condition or impairment is the exclusive source of difficulties related to their handicap (Sullivan, 2011). This approach views impairment as something that must be treated before a person can fully participate in society. According to this viewpoint, persons with disabilities are not equal to others and cannot enjoy the same rights. Oliver (1996) proposed that the reason society has unfavourable attitudes about persons with disabilities is that this model sees them as imperfect, dependent, and helpless, and it is because of this paradigm that disabled people need therapy or rehabilitation.

According to Sullivan (2014), stereotypes about persons with disabilities develop because the medical model portrays them as needing to be fixed or rehabilitated to become more like people without disabilities, as they are typically seen to be unable to completely and independently participate in society. However, disability is more than just a medical condition that requires therapy. While medical treatment is often necessary, it should not dictate how a person lives their life.

Kaplan (2011) suggests that society cannot accept persons with disabilities. The negative attitudes towards disability are deeply ingrained and difficult to change. People with disabilities are often side-lined in society, resulting in humiliation. This is due to society's unfavourable perceptions of persons with disabilities. The misconceptions are further exacerbated in the event of climate-induced disasters.

According to the medical model, only professionals who are specialised and trained can be considered disability experts. Thus, all persons with disabilities are expected to follow the instructions and advice of these trained professionals. As a result of this argument, the language used under this model is mostly medical and clinical. This can sometimes be common within the education, and health fields. As a result of such a view, persons with disabilities are often side-lined and marginalised in society, resulting in humiliation, pity, and fear towards persons with disabilities, being

still widespread today (Jaeger & Bowman, 2005). The medical model's central claim is that, whereas the social model is based on a society's environment, the medical model examines disability from the medical community's perspective.

2 Social Model of Disability

The social model was developed as a product of campaigns by persons with disabilities for equal rights during the US Civil Rights Movement in the 1970s (Shinohara & Wobbrock, 2011). One factor that has been key to the emancipation of disabled people under this model is how an individual is considered disabled by society rather than by their impairment (Mike Oliver Obituary, 2019). Thus, disability under this model is viewed more as an individual's identity just like gender, race, or ethnicity. It is from this perspective that disability is believed to be a result of a mismatch between the environment (both social and physical) and the individual with a disability. From this reasoning, it is rather the environment that produces the barriers and handicaps, not the disability. Therefore, disability can only be addressed through changing the environment rather than the individual with disability.

The social model rejected that disability is a medical condition, as proposed by the medical model, and instead established a new approach where persons with disabilities are valued and respected as society members with full participation rights. Sullivan (2011) goes on to explain that this paradigm does not consider the person's disability to be an issue that requires resolution, rather it is a disadvantage brought on by the combination of societal constraints and personal shortcomings that might impede expectations about their capacity.

According to the Australian Human Rights Commission (1996), disability typically may not show up until later in life if not identified or diagnosed in early infancy. Among other factors, the type and degree of the disability as well as stereotypes, and conceptions of what society considers to be "normal" influence the accessibility and availability of early childhood education programmes in the event of climatic disasters (Rothmans, 2018). Currently, the UN recommends the human rights-based model of disability (Degener, 2017). During the CRPD deliberations, it was recognised that the medical model required to be reviewed and looked at. As a result, the discussion that follows highlights that the human rights-based disability model was acknowledged as the CRPD's most significant success (Degener, 2017).

3 Human Rights-Based Model of Disability

The human rights-based disability model, as discussed by Degener (2017), is considered the most important achievement of the CRPD. This model expands on the social model by incorporating a human rights viewpoint. According to Degener (2017), states are obligated to respect persons with disabilities and to eliminate barriers that infringe on their rights, granting them equal rights and opportunities to engage with society. This approach also emphasises the capability of persons with disabilities to assert their rights and make decisions that impact them (UNHCR, n.d.).

The human rights concept of disability holds that a person's limitations cannot be used as justification for denying or restricting their ability to exercise their rights because they are part of the social compact. It recognises that an individual's impairment is just one facet of their identity. As a result, the diverse requirements of people with disabilities need to be recognised, respected and considered in disability legislation and regulations. It also acknowledges that human rights are interdependent, interconnected, and inseparable, (CRPD Committee, 2018).

General Comment No. 6 of the CRPD Committee clarifies how the human rights model of disability is founded on a social construct idea of disability and incorporates a concept of individuality, which stipulates that impairment cannot be used as a justification for violating someone's rights. From this perspective, humanity has less to do with possessing a functional ability that is considered typical and more to do with the status of being human, but to have both the position of a human rights bearer and an actor of human rights.

The ongoing adverse impacts of climate change on persons with disabilities include increased food and water insecurity, adverse health effects, decreased access to livelihoods and healthcare facilities, a decline in accessible infrastructure, and an increase in migration (Stein, 2022). For that reason, they are often excluded from regulations, laws, and crucial services that are accessible to their counterparts without disabilities. Persons with disabilities are perceived as disproportionately enduring environmental risks and unnatural calamities, from a disability human rights perspective (Kett & Scherrer, 2009).

Though there is ample research on the effects of climate changes, including populations that are at risk and vulnerable, including children, the impoverished,

women and the elderly in both rural and urban settings (Abedin et al., 2013; Cherotich et al., 2012), there is a dearth of literature focusing on the negative impact of climate change on children with disabilities. A UNICEF (2022) study also notes the lack of sufficient data on the bearing of climate change on children with disabilities, yet they are expected to be disproportionately affected due to current disparities.

To combat and reverse the biodiversity loss by 2030 while aligning with the 2030 Agenda for Sustainable Development, the United Nations Committee on the Rights of the Child (CRC Committee) developed the General Comment on Children's Rights and Environment with a special focus on climate change (2023). This noble initiative supports the Kunming-Montreal Global Biodiversity Framework's goal of achieving a shared vision of peaceful coexistence with nature by 2050.

The Biodiversity Convention notably clearly mentions the necessity of implementing the Framework in accordance with a human rights-based approach, this seems to guarantee gender equality and the empowerment of women and girls, indicating an honour of the human right to a healthy, sustainable, and clean environment. Specifically, the CRC Committee's General Comment No. 26 addresses the intersection of child rights and the environment, while emphasising climate change. The Convention recognises the rights of children to access a healthy and clean environment, which includes safe water, a stable climate, a no toxic environment, and a healthy ecosystem, (GC 26, 2023).

General Comment No.26 was acknowledged and commended by the Centre for Child Law (UNICEF East Asia & Pacific, 2020). In this context, children's rights, including their right to development, life, survival, and numerous other rights, will be directly impacted by environmental rights and the effective justification and variation of climate change on a regional level. The intersection of rights and interests of the present generation has already suffered terribly due to the impact of climate change and it will only worsen for decades to come (International Labour Organisation, 2022). Next follows a discussion on the general overview of the climate crisis.

4 Application of The Disability Models to Early Childhood

King and Gregg (2021) put forward that the predisposition of persons with disabilities to climate change and their general lack of access to information on climate change and how to lessen its effects requires the merging of the social and medical approaches to disability into what Shakespeare (2013: 75), calls the critical realist

model of disability, which recognises that persons are both ‘disabled by society *and* by their bodies’. There may be merit to consider if and how this model may apply in the African context.

King and Greg (2021) emphasise how persons with disabilities are disproportionately affected by issues of climate change due to systemic inequities. This line of argument can be extended to the topic in question in order for one to understand how children with disabilities in early childhood are affected by climate change-induced disasters and disruptions. Their framework stresses the significance of including disability in climate justice discussions. Therefore, this underscores the urgent need to attend to compounded vulnerabilities of children living with disabilities as their education is often neglected and marginalised at the height of the climate change crisis. With inclusive policy changes that account for the needs of people living with disabilities, being at the heart of King and Greg’s model, this insight can form the basis for the development of climate-resilient education systems. Such systems can cater for the rights and requirements of children with disabilities while ensuring continuous learning regardless of climatic conditions which may lead to disasters. In line with King and Greg (2021), stakeholders can further advocate for educational strategies that are inclusive thereby ensuring that children with disabilities are not left behind in the processes of climate adaptation mechanisms and efforts of mitigation. Thus, incorporating the outlined principles and insights, a systematic review of the impact of climate change on disabled children’s education, states can greatly benefit from a justice-oriented framework with systemic reform and equity at the core.

Despite the aforementioned arguments on the disabilities model, it is however imperative to state that the CRC Committee prefers the human rights model to disability including in relation to measures to address climate change (Stein & Stein 2022). This study however will use both models for a broader understanding of the issues at hand.

V AN OVERVIEW OF THE CLIMATE CHANGE CRISIS

As the world grapples with the catastrophic repercussions of climate change, there is growing concern for the future of children born in this era. According to Dora (2020), children born in the 2020s are expected to live until 2100, a time when temperatures are projected to rise by up to 4°C (Collins et al., 2013). Elevated temperatures will result in rising sea levels leading to flooding in coastline areas, and extreme weather

events will negatively impact agricultural production and water availability. Consequently, children are expected to grow up in an environment of increasing vulnerability, which poses a threat to their lives, welfare, and well-being in the future.

There is insufficient understanding of the reasons why persons with disabilities are impacted by a myriad of climatic effects, the related elements that determine their ability to adapt, sensitivity, and exposure, and the solutions required to guarantee their capacity for recovery, (Jodoin et al. 2023). The impact climate change has on the development of young children should be a key component of the early childhood development (ECD) agenda. This is particularly crucial in emerging and developing countries where resources are limited, and resilience to climatic shocks is low, (IPCC, 2007).

Zimbabwe and Eswatini are two examples where climate change-induced rainfall patterns extremes such as droughts and floods have negatively affected agricultural production, food security, water management, infrastructure integrity, and public health, (Levin et al., 2012). South Africa is considered to have a higher resilience to climate change than other Southern African countries due to factors such as 'its relative wealth and higher adaptive capacity' (World Bank, 2012). However, South Africans have been subjected to natural disasters like droughts, floods, and storms with consequent social and economic losses which may be compounded by climate change (World Bank, n.d.).

The groups most impacted by these outcomes are women and children. Therefore, it is necessary to develop response frameworks to climate change in general and pay more consideration to the effects of climate change on young children. Next, particular effects are unpacked, such as nutritional deficits, food insecurity, nutritional deficits, education access and health.

1 Effects On Food Security and Nutritional Vulnerabilities

Food insecurity is a prevalent and significant consequence of climate change in Africa, leading to frequent emergencies, (Gray & Mueller, 2011). The connection exists between climate change-induced weather patterns and uncertainty in food supply due to changes in growing seasons, along with an increase in droughts and floods that damage food crops. When it comes to the immediate consequences of excessive heat, drought, and natural catastrophes, children are more susceptible than adults, (Lam,

2007; Davies, 2007). Climate change can disrupt children's development, leading to long-term consequences such as violence, illnesses, economic instability, undernutrition, and migration (Dhiman et al., 2010).

The first one thousand days of life, of a child's life can lay a foundation for optimum neurodevelopment, growth, and health. This period, characterised by swift brain growth and development has the 'greatest developmental plasticity where the infant's developing body and brain are particularly sensitive to their environment', (Moore et al, 2017). Neglecting this period of development would mean that an important window of opportunity is potentially lost putting in place the necessary building blocks for human development (Thorogood et al, 2021).

Unending economic disparities and lifelong health challenges for more than 200 million children below the age of five worldwide are being caused by the loss of academic and developmental opportunities which can be attributed to hunger and poor nutrition. which affects early learning opportunities (Grantham-McGregor et al, 2007; Black et al, 2013). This is mainly because poor nutrition, which results in undernutrition can significantly contribute to the loss of potential learning time and opportunities which further perpetuates cycles of learning inequalities. Furthermore, poor nutrition is also a major obstacle to long-term development and physical growth as poor academic performance can also be linked to stunted growth during this period of child development. Thus, children under the age of five worldwide are not reaching their full developmental capacity due to poor nutrition (Schwarzenberg, et al, 2018) and lack of opportunities for learning (Hurley, et al, 2016). Equally, in South Africa, unhealthy living conditions, poverty, malnutrition, and violence threaten children's ability to thrive. This is further worsened by the unhealthy living conditions for the caregivers which goes on to affect their physical and mental capacity to care for young children (Thorogood et al, 2021).

Moreover, Black and Dewey (2014) emphasise that providing optimal nutrition in the early years together with learning opportunities, supported by responsive caregiving and developmentally appropriate interactions, has been linked with positive early childhood development. Similarly, Yousafzai and Bhutta (2012) define ECE as a crucial stage primarily focused on the first three years of life, during which children's cognitive, social, and emotional abilities gradually develop through the interplay of environmental factors, experiences, and genetics.

In the climate change crisis, children at the frontline are exposed to significant health risks that can trigger a cascading series of negative effects. Climate-induced disasters such as floods, cyclones, and extreme heat pose heightened threats to children's health and safety, (Concern Worldwide, 2023). Disruptions to WASH (Water, Sanitation, and Hygiene) services can result in the outbreak of waterborne diseases like dysentery, cholera, and diarrhoea. Additionally, the daily consequences of climate change can also lead to chronic illness and respiratory diseases which may be a result of air pollution. If combined all these challenges brought about by climate change, can lead to increased rates of school absenteeism, with vulnerable children being affected the most as they lack immediate access to healthcare services (Concern Worldwide, 2023).

2 Key Interventions Promoting Optimal Nutrition In Young Children

Through the National Integrated Early Childhood Development (NIECD) policy, the South African government has shown its full commitment to delivering comprehensive, equitable, and universal ECCD services aimed at supporting children's development from conception until they begin formal schooling (NIECD Policy, 2015). The Policy establishes minimum standards and outlines a range of essential ECD services designed to foster children's social, emotional, cognitive, and physical growth. The services encompass nutritional support, child health services, social services, and early learning programmes. The policy also provides a strong focus on nutrition through the call to strengthen the national strategy on food and nutrition through a rigorous review to ensure that children under the age of five are prioritized to ensure their health and optimum development. To this end, nutrition-related innovations are being continuously introduced by the government in conjunction with civil society organisations. For instance, some ECC centres have developed nutrition gardens to enhance children's sustenance and create additional income, while the Expanded Public Works Programme (EPWP) has supported these initiatives of gardens at ECD centres through the provision of incentives for the adults who work in these gardens, (City of Cape Town, 2013).

To add to the discourse, a study by Grantham-McGregor et al. (2014) examined the integration of child-development interventions and their synergistic benefits to development and growth outcomes. In their report, they admitted to the fact that there had been few studies in this area and that there was little evidence to support the

notion of a linkage between synergistic benefits and positive outcomes, as a result of integrated interventions. However, worth noting is the fact that their study revealed how ECD interventions promoted child development, while nutrition interventions were found to benefit growth outcomes and development.

In line with these findings, in a situation where children have poor nutrition and inadequate learning opportunities, there is an elevated risk level for poor development (Walker et al., 2007; Walker et al, 2011). Therefore, considerable nutritional interventions should be enhanced for results in attaining full developmental outcomes. It is also critical to recognise the fact that integrated interventions have to be designed to affect and impact multiple developmental outcomes, as this is necessary to justify combining ECD interventions and nutritional programmes to highlight cross-sectional areas that can be leveraged.

3 Effects On Education

According to UNDP Zimbabwe (2017), climate change has a direct impact on education. The main effects of climate change on education stem from extreme weather events, such as heavy rains, strong winds, floods, and storms. Additionally, rising temperatures and droughts contribute to poor agricultural yields and food shortages, which negatively affect educational and developmental outcomes. The situation becomes worse as these extreme weather conditions may also reduce access to safe drinking water, and increase the prevalence of climate change-related illnesses, resulting in even higher absenteeism rates or even dropouts among vulnerable children. The UNDP also argues that, beyond these direct effects, climate change also impacts education indirectly through household coping strategies like migration, income-generating activities, which further disrupt children's access to and continuity in education. In Zimbabwe, climate change has had adverse effects in the southern region as harsh weather conditions have damaged infrastructure including schools, roads, and bridges (Chirisa, 2024). During the 2016/17 agricultural season, 18% of the country's schools were affected by heavy rainfall which caused significant destruction, disrupting education by affecting nearly 500 000 children. Damaged classrooms became unusable, leading to the cancellation of classes. In such situations, the school dropout rates will rise when homes are destroyed as families are evacuated to safer places. This affects children with disabilities more as their specialised services are not prioritised in such cases.

In a broader context, when Typhoon Haiyan struck the Philippines in 2013, it destroyed more than 90%. Schools that remained intact were repurposed for temporary shelter to accommodate the affected families in the area (Concern Worldwide, 2023). As a result of this climate change-induced disaster, it was reported that thousands of children missed school for at least three months. Thus, with the rising rates of such disasters annually, similar disruptions to education are expected to also rise, and children with disabilities in ECD will lose as service provision priorities shift to support emergency response mechanisms. It also shows the need to review disaster response strategies to include the needs of children with disabilities. This is mainly due to the fact that recovering from such disruptions is not easy for both the school and the child as some may never return to school, (Concern Worldwide, 2023).

Droughts and rising temperatures contribute to poor agricultural yields which may lead to malnutrition among school aged children due to food shortages. This negatively affects their ability to retain information and reach their full potential in academic performance. Furthermore, food insecurity also increases the rate of absenteeism as children may withdraw from school to assist households in looking for food. According to UNDP (2017), these consequences have a gendered dimension as boys are typically prioritised over girls, and young girls are preserved for early marriages. The situation is further worsened if the child is living with a disability. In situations where the availability of water is affected, girls are the ones who do most of the chores like looking for drinking water, which disrupts their learning cycles. According to UNDP, primary-aged children are the most affected and it becomes even worse if the children live with disabilities.

A recent UN climate study has highlighted that human activities are the root cause of the catastrophic climate issue, and immediate action is required to mitigate the global disaster (Gray & Wise, 2016). However, there is an urgent and often overlooked education problem that starts in childhood as climate change's impact on early life is not uniform with every child. The disparities in early childhood are more significant across wealth and ethnicity. For instance, three out of every four children from middle and upper-income households are expected to be kindergarten-ready, compared to fewer than half of children from low-income families, (van Voorhis et al., 2013). Climate change is one of the most serious threats to our economy, society, and environment, and if left unaddressed, it will have devastating consequences for current

as well as future generations.

Wolbring (2019) argues that climate change would worsen the life quality of people with disabilities and other marginalised groups, exacerbating their suffering. In consequence, climate change is projected to deteriorate their abilities, including their capacity to adjust to existing livelihood alternatives and retain resilience. Many countries have pledged to provide basic primary education to every child, but those with disabilities are often overlooked, as noted by UNESCO (2012). Ghana committed to safeguarding children's rights upon signing the UNCRC in 1990 (Mantey, 2014). However, Mantey's study reveals that despite advocacy efforts in Ghana to include disadvantaged children, they may still be deprived of education due to sociocultural norms, restrictive laws, and inadequate teacher training, among other factors. These challenges are further compounded by climate change-induced weather patterns.

4 Effects On Health

Floods and droughts are examples of severe weather events, while forest fires and heatwaves, as well as changes in vector-borne and infectious illness, and food and water accessibility, all have the potential to impact early child growth. (Lam, 2007). Air pollution, which hurts children's cognitive and physical development, is particularly noticeable concerning climate change. It has many of the same origins as greenhouse gases, but it is easier for individuals to quantify and take local accountability. Therefore, it is important to understand that extreme weather events, droughts, floods, forest fires, heatwaves, and changes in vector-borne and infectious illnesses, can all have a substantial bearing on early childhood development.

Children's health is impacted by climate change in several ways, including more polluted air, severe heat waves, reduced water quality, and shortages of food (Levine, 2020). Thus, children are more susceptible to mental health issues, malnourishment, respiratory, allergy, and infectious ailments. Research is abounding on the negative impact of climate change on children's growth and development (Hellden et al, 2023). The authors further suggest that there is evidence pointing to the fact that the effects may be experienced from the pregnancy period, (Kidd, et al, 2023). A review by Kidd et al (2023) found that the ever-changing climate events and severe weather patterns lead to a significant array of problems for growing children. Kidd and others add that the negative impact on young developing brains could be a result of both direct and indirect origins such as hyperthermia and vector-borne disease or malnutrition.

The World Health Organisation (2022) provides another dimension that the interference of brain development during the prenatal period may also significantly impact the subsequent child development phases, affecting the resultant adult product. Anderko and Pennea, (2022) affirm that ECD stages are very vulnerable periods especially to harmful and undoubtedly lifelong impacts of climatic changes, this is because of the rapid metabolisms and fast-growing organs and body systems of young children. For instance, exposure to polluted air may not be reversible or cured if the lungs are badly affected. Ferschmann (2022), concurs that these environmental issues have been connected to mental health challenges in young children.

Table 1 shows some the effects of severe and extreme weather events developing children.

Health issues	Harmful/Damaging effects
Heat	Disorders such as sudden infant death syndrome, dehydration, heat stroke
Reproductive	- Extreme weather patterns effects have been associated with low and premature births. - Lung infections leading to asthmatic conditions may also result from exposure to air pollution during pregnancy (Smith, 2020)
Malnutrition	Extreme weather conditions badly affect crop/food production leading to pre-, post, and maternal risks such as undernourishment.
Mental health	Risks of panic attacks, anxiety stress and sleep disorders, depression, uncertainty of the future, and impending feelings of helplessness may affect the developing children.
Infections	Exposure to water-borne and vector-borne diseases, cholera, and malaria, adversely impact the growth of children

Adopted from Anderko and Pennea, 2022, WHO 2022 and Kidd et al (2023)

When compared to adults, children can consume more food, breathe more air, and drink more water, because of their developing body systems (Kidd et al, 2023). Consequently, they are projected to live longer than adults and frequently play outside, and so they are eventually more exposed to new or worsening environmental threats. Though there is an upsurge in the research focusing on the impact of climate change on the health of developing children, the negative effects on children far overshadow the positive impacts. Hellden et al (2023) highlight that some regions benefit from global warming and thus reduce cold-related deaths and diseases.

Notably, the changing environment presents unique challenges for young children, more so for children with disabilities, (Madzwamuse, 2011). While the impact of climate change is predicted to be widespread and diverse, children with disabilities are particularly vulnerable to its effects. This is because children constitute one-third of the world's total population, (UN Children's Fund, 2010). The situation is complicated by developmental changes and their increased susceptibility to harmful experiences in the early years of the growth period, as well as their lack of agency and voice. As a result, children with disabilities have unique experiences of climate change and unique qualities that disturb their adaptation abilities, (Marangu, 2022). It is submitted that, although children are mostly vulnerable to the risks and effects of climate change, their concerns are often disregarded in policy frameworks, both at national and international levels. Even when commitments are made, they are not always clear or effective in addressing the challenges that climate change has on the well-being of children, including their health, education, and development. However, protecting the environment and promoting children's welfare are interconnected goals that can be mutually beneficial. Any efforts made to improve environmental quality can also help guarantee, and provide the fundamental requirements of children with disabilities.

VI CONCLUDING REMARKS

Highlights of this chapter are the intersection of climate change, ECD, and children's disability rights within a global context. It emphasised the disproportionate vulnerabilities confronted by children with disabilities, predominantly in marginalised communities, due to climate change-induced challenges such as food insecurity, health risks, and disruptions to education.

The chapter outlined international and regional frameworks, including the

UNCRC, CRPD, and ACRWC, which advocate for inclusive policies and emphasise the rights of children to equitable access to education, health, and social services. It underscores the importance of integrating climate mitigating mechanisms and strategies with inclusive disability approaches. Disability models like human rights, the medical and social models, were explored to frame understanding and solutions for these challenges.

Ultimately, in order to address climate change issues, the chapter calls for rights-based approaches that are inclusive and transformative, ensuring that children with disabilities are supported in their development and fully included in global and local climate action strategies. This is mainly due to the fact that rights-based approaches are grounded in international human rights instruments like the Convention on the Rights of Persons with Disabilities (CRPD) and the Convention on the Rights of the Child (CRC). These treaties obligate states to protect respect and fulfill education for all children and they ensure that inclusion is not optional but rather a matter of justice and accountability.

CHAPTER THREE

IMPACT OF CLIMATE CHANGE ON CHILDREN WITH DISABILITIES IN ESWATINI AND SOUTH AFRICA WITH AN EMPHASIS ON THE LEGISLATIVE AND POLICY FRAMEWORK

I INTRODUCTION

Globally, climate change impacts the welfare of children. It is expected to be diverse in adversity and to a greater magnitude, underscored by the current social inequities and economic imbalances. On June 25, 2013, while President Barack Obama was presenting his Climate Action plan, he said, “Someday, our children, and our children’s children, will look at us in the eye and they’ll ask us, did we do all that we could when we had the chance to deal with this problem and leave them a cleaner, safer, more stable world?” (Currie & Deschênes, 2016). Children with disabilities may even have more questions for us.

Being a fundamental right, education must be made accessible to all children, regardless of ability or disability. In this regard, inclusive and equal education goes beyond mere integration by creating environments that celebrate diversity, promote equity, and provide tailored support to meet individual needs (Bhat, 2023). Section 29 of the South African constitution states that;

- “(1) Everyone has the right—
- (a) to a basic education, including adult basic education; and
 - (b) to further education, which the state, through reasonable measures, must make progressively available and accessible.”

Inclusivity recognises that all children deserve the opportunity to grow, thrive, and learn within an all-encompassing and supportive learning environment (Shumba & Moodley, 2018). ECE critical development phase, laying the foundation that is firm for children’s well - being and future learning (Ainscow, 2015). However, disabled children often face unique barriers in accessing quality education and achieving optimal outcomes during this crucial period (Shumba & Moodley, 2018). Thus, it is essential to understand the policies, legislation, initiatives, and programmes in place to support their education.

The focus of this chapter is to provide a comparative analysis of policies and legislation governing the education of children in early childhood and affected by disabilities in both Eswatini and South Africa, in the light of climate change. It will examine the key policies, legal instruments, and initiatives that promote inclusive

education practices and ensure equality in accessing education opportunities for all children, including those with disabilities. The discussion assesses all the national and international legislations, policies, and frameworks in the context of both countries, as well as their execution at the national level. Climate change adversities confronting children with disabilities are all dealt with in terms of policy frameworks.

II LEGAL INSTRUMENTS IN ESWATINI

Eswatini has a rich and varied regulatory framework where it has ratified and signed some major international conventions, protocols and treaties on human and child rights (National Plan of Action for Children in Eswatini 2023-2027). These have been supported by adopting and enacting laws that largely conform to the standards outlined in international instruments (UNICEF Eswatini, 2023).

Britto et al. (2017) further echoed sentiments that a stable environment is the foundation of any government's efforts to create opportunities for early learning. Every government must devote itself to educating and building the human infrastructure required for the new global economy's ability to access services, as well as education that provides excellent early learning opportunities to all children (Mardomi & Mardomi, 2023). Eswatini ratified the UNCRC treaty in 1995, and the country's National Plan of Action for Children (NPA) has supported children's rights. According to UNICEF Eswatini, (2023), Eswatini declared

“a National Plan of Action for Children (NPA) that was adopted for 2023 - 2027 to ...

- “Increase children's awareness of climate change and environmental degradation (by incorporating it into the school curriculum)
- reduce the vulnerability of children to the impact of climate change by building adaptive capacity and resilience. One proposed activity under the thematic areas of child protection is:
- to strengthen programmes for the protection of children during natural and man-made disasters.”

The above comes as consolation for the children with disabilities, as it also touches on the school curriculum. It, however, does not clearly state how teachers and educators should reduce vulnerability and leaves more to the discretion of the educators. With such an approach, children's rights on disability issues seem to remain ignored and only paid lip service to. The government is obligated to defend, respect, and promote children's rights (Government of the Kingdom of Eswatini 2019a). SITAN (2019) mentioned that the country's (Eswatini) UNCRC Committee reported that issues on

the access to ECD services are still fragmented for children with disabilities. There are inadequate measures to guarantee the enjoyment of rights by children with disabilities, primarily concerning their education, health, and quality of life (ibid).

In light of this discussion, I also significantly note the observations of the CRC Committee on the progress made by Eswatini. In 2021, the Committee issued its observations from its assessment of the country's adherence to the UNCRC. The Committee acknowledged Eswatini's progress in areas like primary school enrolment and child health outcomes. Most importantly, the committee commended legislative measures like the Free Primary Education Act (2010), the Children's Protection and Welfare Act (2012), and the Sexual Offences and Domestic Violence Act (2018).

However, despite the positive steps taken towards adherence to the UNCRC, several areas of concern were flagged through the assessment. The absence of updated national policies for children was flagged as the National Children's Policy and National Plan of Action for children had not been renewed upon expiration at the time of assessment. This was further compounded by the lack of necessary regulations and resources for the implementation of existing laws that protect children, such as the aforementioned Children's Protection and Welfare Act. The observations of the assessment also raised concerns over the National Children's Services Department's limited capacity to effectively coordinate child rights policies.

Considering the discoveries from the Eswatini progress assessment, the committee made recommendations for the country to effectively address the aforementioned issues. First, the need to urgently adopt updated national policies and action plans for children was emphasised with the backing of adequate financial and technical resources. Second, the committee highlighted the need to enhance capacity-building efforts for the National Children's Services Department, for effective coordination, and the need to implement regulations for existing child protection laws. Overall, Eswatini has made some positive strides toward addressing climate change issues and children with disabilities through the acceptance, ratification, and adoption of international conventions. However, there is still room for improvement, as evidenced by the observation of the assessment conducted by the committee.

The ACRWC, with particular reference to the African child, outlines the state's commitments to children's rights and responsibilities (UNICEF, 2015). In 2012, Eswatini ratified the ACRWC (Government of Eswatini, 2016). The ACRWC

represents essential human rights concepts by defending children's rights. By approving a coordinated plan to implement services that will ensure the fulfillment of children's rights as constituted by the UNCRC and ACRWC treaties, as well as the operationalisation tool, the Child Protection and Welfare Act (CPWA), the Eswatini government reaffirmed its commitment (Government of Eswatini, 2016).

In light of these developments, in March 2019, the African Committee of Experts on the Rights and Welfare of the Child (ACERWC) reviewed Eswatini's initial report on its implementation of the African Charter on the Rights and Welfare of the Child (ACRWC). The country was also commended for enacting laws and policies that align with the requirements of the charter. Furthermore, another positive step highlighted was the creation of the National Children's Coordination Unit to oversee child rights issues and the implementation of related policies.

Despite positive developments being noted as progress, the ACERWC also identified some challenges in Eswatini. The Committee raised the need for significant investment steps to be made towards making education accessible and inclusive through the removal of barriers preventing children from continuously attending school.

1 The National Disability Policy

Eswatini adopted the UNCRPD in 2012 after signing the convention in 2007 and developed a national disability policy reform document to implement the UNCRPD in many sectors, including education (Magagula, 2017). While most of the UNCRPD's concepts are echoed in the national policy, some components relating to financial and geographic accessibility are contextualised (ibid). Some gaps in policy implementation caused political, economic, and attitude issues as well as general and policymaker-specific issues are evident and uncover a lack of disability conscientisation in Eswatini.

2 Eswatini Policies On Children with Disabilities

The Ministry of Education and Training in Eswatini defines an inclusive education system as one where the needs of all learners are met regardless of health status, gender, learning capacity, disability, age, life circumstance, or any background (Leblanch, 2023). "Inclusive education also means that no child should be excluded from access to education" (Ministry of Education and Training 2011: 12).

3 The Constitution of the Kingdom of Eswatini 2005

The Kingdom of Eswatini's 2005 Constitution establishes a legislative framework to safeguard children's rights. It expressly provides for children's right to education, care from caregivers or guardians, protection against all forms of abuse and exploitation, and medical care. Notwithstanding these clauses, other laws have not yet been implemented to sufficiently address the defense, advancement, and realisation of child rights. Climate change challenges for children with disabilities are silent in the Constitution, despite that these are thorny issues affecting the vulnerable members of society. Article 29(6) of the Eswatini Constitution refers to the education rights of children:

“Every Swazi child shall within three years of the commencement of this Constitution have the right to free education in public schools at least up to the end of primary school, beginning with the first grade.”

Article 30 of the Eswatini Constitution says:

“Rights of persons with disabilities 30. (1) Persons with disabilities have a right to respect and human dignity and the Government and society shall take appropriate measures to ensure that those persons realise their full mental and physical potential. (2) Parliament shall enact laws for the protection of persons with disabilities so as to enable those persons to enjoy productive and fulfilling lives.”

Article 216 refers to the protection of the environment:

“(1) Every person shall promote the protection of the environment for the present and future generations. (2) Urbanisation or industrialisation shall be undertaken with due respect for the environment. (3) The Government shall ensure a holistic and comprehensive approach to environmental preservation and shall put in place an appropriate environmental regulatory framework”. The duties of citizens are explained to include: in article 63(i) “The exercise and enjoyment of rights and freedoms is inseparable from the performance of duties and obligations, and accordingly, it shall be the duty of every citizen to protect and safeguard the environment.”

4 The Children Protection and Welfare Act of 2012

This Act is a constitutional obligation that unites all legislation related to children's interests. The policy gives priority to the child's welfare and supports all the country's international legal obligations on child-related matters, (UNICEF Eswatini, 2023). The Act outlines the rights and responsibilities of family-based care of orphans and children in contact with the law are spelled out. The Act criminalises all forms of child exploitation and neglect, establishes children's rights together with parental and state obligations, and specifies the correct channels and procedures when dealing with protection and childcare. It is submitted that the Act also does not make any reference to the effects of extreme eventful weather-induced hazards that affect the education of children with disabilities.

In reference to education and disability the Act states;

“9. Every child has the right to have their basic needs met, including education, health care, diet, clothing, shelter, medical attention, and social and other services required for their development. This includes children living with disabilities.”

“11. Every child living with a disability has the right to benefit from special care and education, regardless of the type and severity of the disability for a fuller life in society.”

5 The Persons with Disabilities Act (2018)

The Eswatini government domesticated the UNCPRD through the enactment of the Persons with Disabilities Act of 2018 (UNICEF Eswatini, 2023). The Act aims to guarantee and protect the welfare and rights of all persons with disabilities, including children. It is important to include children in matters that concern them. This would mean representation and lobbying for their rights. However, the legislation does not mention climate change or rights related to a healthy environment, but requires the government to provide support in accessibility and universal design. It is important to note how the Act mirrors the key UNCPRD commitments by guaranteeing the rights of persons with disabilities to education and healthcare for all children (including those in early childhood), as it mandates non-discrimination and equal access to equal opportunities.

6 The National Children’s Policy (2009)

The Eswatini Government established the National Plan of Action for Children 2023-2027 to reflect the country’s policy and constitutional commitments to provide for all children, (Government of Eswatini, 2016). The government identifies opportunities for sustainable development for all children who must be allowed to develop in environmental settings that stimulate them to live their best lives and, as a result, become dynamic human capital for the country (UNICEF Eswatini, 2023).

Major principles established in the National Policy for Children 2009, as well as the results of the UN and African Union committees on children's rights in 2021 and 2017, are all incorporated in The National Plan of Action for Children 2023-2027 (UNICEF Eswatini, 2023). The main focus is to provide guidelines that connect the goals of the policy to functional programmes for children as well as guarantees to the UN Convention on the Rights of the Child. The welfare of children with disabilities is registered as a major issue in this policy as well, however with no mention of climate

change disasters, a topical issue that necessitates constitutional consideration.

7 Inclusive Education Policy

In the pursuit of equitable education for all, in 2018, Eswatini introduced the Inclusive Education Policy. Eswatini has an Inclusive Education Policy emphasising and safeguarding the rights of children with disabilities and access to quality education (Mtsetfwa, 2020). The policy was introduced to transform the educational systems, structures, and methodologies to cater to the different needs of all learners, inclusive of those with special needs, like persons living with disabilities. Therefore, the policy underscores Eswatini's commitment to ensuring access for children regardless of status, ability and background. The policy emphasises the removal of barriers to learning by fostering adaptive curricula, inclusive learning and embracing diversity.

The Ministry of Education and Training in Eswatini has recognised the importance of integrating climate change education into the curriculum (Government of Eswatini, 2018). They have developed educational materials and resources that raise awareness of the impact of climate change on students, including those with disabilities. By incorporating climate change education, Eswatini aims to empower children with disabilities to become environmentally conscious citizens. (Swaziland NDMA, 2015). However, despite good policy intentions, there are still persistent challenges in availing the curricula accessible formats for people with disability (Mpofu & Mkhathshwa, 2024). Therefore, the marginalisation persists as children with disabilities still face challenges that impede access to equitable and quality education

8 The National Disaster Management Agency (NDMA)

Climate change is widely acknowledged to impact the rate, intensity, and regularity of hazards, including floods, cyclonic winds, storm surges, and droughts (Oseni & Masarirambi, 2011). NDMA in Eswatini is responsible for coordinating disaster risk reduction efforts, their work is to guarantee inclusivity and the addressing of specific needs of the vulnerable population in all disaster preparedness plans (Swaziland NDMA, 2015). NDMA collaborates with educational institutions to develop inclusive emergency response protocols and provide training on inclusive disaster management.

It should also be noted that Eswatini has also adopted the National Climate Change Policy of 2016, which provides a working context for addressing climate

change disasters at a national level. The policy emphasises the greater need for climate adaptation to lessen the effect of shock induced by climate change and also reduce systematic inequalities and vulnerabilities through enhancing community resilience. This is a crucial policy as it provides the basis for integrating climate change issues with all the country's planning processes and thereby promoting sustainable development.

9 Summary of Findings On the Legislation and Policy of Eswatini

Eswatini's legislative and policy framework addressing climate change and children with disabilities demonstrates a commitment to sustainability and inclusivity. Significant strides have been made in addressing these issues through the Children Protection and Welfare Act of 2012, the Persons with Disabilities Act (2018), the National Children's Policy (2009), and the Inclusive Policy. While overall progress has been made, many challenges persist, and a collaborative approach is needed to deal with them.

III CLIMATE CHANGE VULNERABILITIES OF CHILDREN WITH DISABILITIES IN ESWATINI

The UNICEF declaration of 2023 states that "including children with disabilities in all aspects of life must be a priority – in Eastern and Southern Africa as in the rest of the world, (UNICEF Eswatini, 2023). Every child, everywhere, has something to offer. His or her energy, talents, and ideas can make a positive difference to families, communities, and the world". One would expect to find this in all legislation that deals with children. UNICEF Eswatini (2023) in their report highlights that "children are disproportionately vulnerable to, and impacted by, climate change due to their specific developmental needs and physiology". In Eswatini, many children face multiple deprivations related to health, education, social protection, and living standards, in addition to income poverty, making them more vulnerable. Children with disabilities are the most affected, (Masuku, Bornman, & Johnson, 2023). This is a call to action for the government to stand up and protect the children especially the vulnerable and disabled.

The UNICEF (2023) analysis goes on to emphasise the need to provide adequate protection services for children most susceptible to climate change,

including Orphaned and Vulnerable Children (OVCs) and children living with disabilities, and collaborate with civil society organisations to raise awareness on the adverse effects of climate change on the vulnerable population living with disabilities as it relates to poverty, poor housing, limited access to essential services, information, and community assets; take action based on the results. There is no specific instrument that dictates the strategy to be adopted in implementing these policies.

Eswatini national disability policy reforms, while aligned with the UNCRPD, have been found to have gaps in implementation, particularly in terms of geographical and financial accessibility (Masuku et al, 2023). This is concerning given the elevated vulnerability levels of people with disabilities, including children, to the impacts of climate change (Wolbring, 2012). Climate change is expected to worsen the disease burden for children in low - and medium-income countries, and may lead to increased exposure to extreme weather and toxic chemicals (Tillett, 2011). The disability rights approach to climate regulation and governance is therefore crucial, emphasising the need for manageable climate adaptation and mitigation policies, frameworks, and programmes (Jodoin, Lofts, & Ananthamoorthy, 2020). It underscores the importance of ensuring the inclusivity of Eswatini's policies on climate change for children with disabilities.

Children with disabilities are particularly vulnerable and at risk of the physical health effects of climate change, as extreme temperatures can potentially cause heat-related illnesses, such as heat stroke and heat exhaustion. Additionally, during floods or storms, these children may face challenges in accessing healthcare services, exacerbating their health conditions. The International Panel on Climate Change (IPCC) (2014) states: "People who are socially, economically, culturally, politically, institutionally, or otherwise marginalised are especially vulnerable to climate change and also to some adaptation and mitigation responses (medium evidence, high evidence)". Bhebhe and Vilakati (2021) provide valuable insights into the challenges of equality and accessibility in ECE services in the Manzini Region of Eswatini. While the study does not explicitly mention climate change issues, its findings on the barriers to accessing ECE services can be contextualised within the broader framework of climate change and its negative effects on vulnerable children. Their emphasis on equality and access issues in ECE services underscores the significance of strategies that are adaptive and inclusive to safeguard the education of children with disabilities. When confronted by severe climate-induced shocks and their adverse effects.

The IPCC goes on to state that vulnerability is a result of social processes that lead to socioeconomic inequalities and exposure to discrimination on the grounds of gender, ethnicity, disability, and class. Concerning education, one can look at the lack of ramps for physically disabled learners, more so in times of natural disasters, and temporary shelter has to be sought (Masuku, 2020). Ferrol and Novelo (2023) declare that children with disabilities continue to face significant barriers to inclusion in a modern society grappling with many challenges. The key factors contributing to their marginalisation include insufficient funding, a lack of empathy and compassion from the general public, and worsened by a lack of strong policy enforcement mechanisms by public officials. These issues have ensured that children with disabilities are systematically excluded from many opportunities. Leblanc (2023) highlights the neglect of children with disabilities in the aftermath of weather-related disasters, as he claims that governments prioritised “normal” students when infrastructure is damaged, which further underscores the disregard for their rights. The above is just an illustration of how children with disabilities continue to be marginalised even by the powers that be.

Climate change may result in evacuating people in cases where natural disasters such as floods have occurred. This displacement results in getting housing for the affected. Leblanc (2023) says, “If students have to be displaced, the normal students will go, but those with disabilities - where are you going to send them?” This scholar uses the word ‘normal’ to refer to children without any disability. This does not translate to children with disability being abnormal.

1 Physical Disabilities

Disabilities are diverse and include cognitive and physical impairments. It is worth noting that each scenario calls for a different approach and strategy because children with disabilities are not homogeneous. Children with disabilities are particularly vulnerable to the physical health impacts of climate change (Masuku, 2020). Many schools have physical environments that are challenging to navigate, both in terms of reaching the school and moving within the premises. Teaching and learning materials are often not adequately adapted. Many schools are still inaccessible to students who use wheelchairs. Additionally, there is a lack of toilets and sanitary facilities designed to accommodate children with physical or visual impairments. Insufficient natural lighting in classrooms creates difficulties for students with vision impairments. School

transportation is generally unavailable, and when provided, it is not designed to meet the needs of children with disabilities (Hussey, MacLachlan, & Mji, 2017).

In the report from the 2023 Intergovernmental Panel on Climate Change (IPCC) sixth assessment report, children are only mentioned twice. Additionally, children are also completely left and the youth are only mentioned four times in the UN technical dialogue report, which was released in September 2023. This demonstrates the exclusion of children in general from most policies, not to mention the children with disabilities.

Concerning education, it should be stated that inclusive education only exists on paper, yet children with disabilities still fail to find their place in education. “Besides, many children with disabilities are still unable to access even basic primary education due to several factors, from a lack of transport to the inaccessible environment and school buildings, lack of equipment and resources in schools, teachers without the necessary skills, large class sizes and negative attitudes within families and communities.” (Banks et al, 2022). A study conducted in Eswatini by Nkomo (2022) unveiled a pressing need for more extensive and focused training and awareness campaigns on disability challenges in Eswatini. Variables in economic, social, and political platforms intersect to cause marginalisation, uneven access to resources, and a lack of services for children with disabilities.

Dhemba and Dhemba (2018) emphasised the significant benefits of early intervention and education for young children with disabilities, citing how the interventions can positively improve their cognitive and social development. All children are guaranteed the right to engage in natural environments and ECD programmes within their communities, irrespective of their ability (ibid). Though there is a dearth of studies on children with disabilities, the few that have been conducted reveal an urgent and indispensable need to delve deeper into the well-being of these vulnerable children.

2 Mental Health Impacts

Climate change has substantial negative mental health impacts on children with disabilities. Disasters or climate-related events can lead to increased anxiety and stress among these children, who may require stable routines and support systems (Magagula, 2017). Disruptions triggered by climate-related disasters can lead to feelings of isolation, vulnerability, and emotional distress. Such can be corrected by

education and policies that ensure the well-being of the child.

“Education provides children with the knowledge and skills they need to grow and prosper, creating well-being, pathways to future opportunities, and healthier lives. Ensuring opportunities for all children to succeed in school requires equity and inclusion that guarantees access, participation, progress, and achievement of key learning outcomes. This means addressing all aspects of a child’s educational path and eliminating the disparities and barriers that begin early in life, accumulate during childhood, and generate further disadvantages for the most marginalised children, including children with disabilities” (UNICEF 2023).

Mavundla (2015) reiterates that the challenges of accessing health information and healthcare continue to be problematic for all citizens with disabilities in Eswatini, irrespective of their status and geographical location.

3 Teacher Training

In Eswatini, teachers may have limited development and training opportunities in inclusive education practices (Shongwe, 2024). They may not possess the required skills and knowledge to effectively support and teach children with diverse learning needs, including those with disabilities. This can hinder their ability to create inclusive learning environments and provide appropriate instructional strategies.

A study by Thwala (2015) revealed that the gap in the lack of understanding and skills to deal with disability issues among students has made inclusive education seem stressful. Bagree and Lewis (2013:2) explain “that teachers are often simply not trained or supported to teach children with learning disabilities, which makes these children among the most marginalised in terms of educational opportunity and attainment”. Despite legislation and policies to include learners with disabilities, without adequate training, it would be paying lip service and not addressing the challenges in the classroom and learning environment.

Zwane (2016) argues that proper training of teachers equips them with the requisite skills and material to deal with diverse populations of students while being able to also meet their learning needs in all categories and levels. It is crucial to equip teachers with the right skills to handle learners with disabilities, ranging from physical to cognitive disabilities. This calls for robust training programmes before one starts teaching and continuous review and training to ensure that educators stay abreast and are still effective in the discharge of their duties. This can only be achieved through

ensuring the implementation of measures such as professional development in the form of preservice training on inclusion and instruction for attaining the developmental strength of each learner (UNESCO- International Bureau of Education 2008). In most scenarios, pre-service training is available, yet when one needs to further those studies, the expenses are borne by the individual. Mariga, et al. (2014:90) are of the view that the aspect of inclusion can only succeed if teachers are well-equipped, trained, and prepared to teach all children.

Phiri (2021) asserts that the Eswatini government had committed to deploying inspectors under the special needs division to address the needs of learners with disabilities across the country's four regions, and while this initiative was implemented, it remains insufficient as more comprehensive efforts are required to fully support the programme. This aligns with earlier findings by Maseko (2014), who argues that the support provided to teachers on the ground is limited, as actual support must go beyond occasional visits by inspectors. It requires a robust support system, which is missing for teachers to carry out their duties efficiently and effectively. In his study, Zwane (2016) resolved that a supportive setting must be collaborative for all stakeholders including caregivers, school authorities district officials, and teachers.

IV LEGAL INSTRUMENTS IN SOUTH AFRICA

In South Africa, a plethora of policies was developed as part of the implemented reforms during the early post-independence years, which were targeted at improving the well-being and welfare of children and those with disabilities (Philpott & Muthukrishna, 2019).

1 The South African Constitution (1996)

The South African Constitution (1996) acknowledges that all children are guaranteed access to education basic health and social protection (sections 27, 28, and 29), and bars all forms of discrimination based on disability (section 9). According to Fredman et al (2022), a lot of children with disabilities have limited access to educational-related services or are in school institutions that do not meet their unique needs. The national legislation seems to fall short of embracing the needs and wishes of these vulnerable children, as required by international law.

2 Children's Act 38 Of 2005

Implementing the government's obligations under the United Nations Convention on the Rights of the Child (UN, 1989) was the goal of the Children's Act 38 of 2005 (amended in 2007). The goal was to add significant protections for children with disabilities to this legislation because of active advocacy by the civil society (Jamieson & Proudlock, 2009). Early childhood development is provided for in Chapter 9 of the Children's Act 38 of 2005 (National Government of South Africa, 2010), which explicitly stipulates how early childhood programmes must be made accessible to children with disabilities. It also gives effect to certain child rights outlined in the South African Constitution. Notably, the Children's Act 38 of 2005 mentions children with disabilities needing to be free from discrimination (section 11) but does not mention climate change. The Constitution also refers to a right to a healthy environment for everyone in section 24;

“Everyone has the right

- a. to an environment that is not harmful to their health or well-being; and
- b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that
 - i. prevent pollution and ecological degradation;
 - ii. promote conservation; and
 - iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.”

3 National Integrated Early Childhood Development Policy (NIECDP) 2015

The targeted focus of the National Integrated Early Childhood Development Policy of 2015 was to extensively promote inclusive ECE services in South Africa. Numerous national and international instruments, such as the United Nations Convention on the Rights of the Child, the African Charter on the Rights and Welfare of the Child, and the Constitution of the Republic of South Africa, expressly mention the importance of access to services that support the development of young children. Clark, Naidoo & Lilenstein (2019) report how lack of funding and support hinders the full implementation of the policy in identifying and assessing programmes as well as early intervention. Such a situation raises the alarm for the proper laying of a strong foundation for growth and development of children during their early years, as argued by Stock and Moodley (2011:11). Viviers (2009) emphasises that children with disabilities require equality in accessing benefits and services, however, they often face obstacles in accessing programmes related to health, early learning, information,

and recreational facilities.

4 The Protection and Promotion of Persons with Disabilities Bill

The South African Law Reform Commission (SALRC) in October 2024 introduced the Protection and Promotion of Persons with Disabilities Bill for public consultations. The draft legislation aims to align the national laws with the UNCRPD, which was ratified in 2007 (LitNet, 2024). Furthermore, the Bill also seeks to provide a comprehensive legal framework to uphold the rights and fundamental freedoms of persons with disabilities. In line with the principles of the UNCRPD, the Bill has provisions to eliminate all forms of discrimination, promote accessibility and foster inclusion across sectors, including education and healthcare (GroundUp, 2024). It is important to note that the Bill mandates establishing government focal points and independent monitoring bodies as required by the UNCRPD. Although these processes can be commended, it is worth critically note how the consultation processes have been criticised for not being accessible, Majid (2024). According to Majid (2024), the Bill and its discussion papers were not accessible to all as they were published in complex legal jargon without also transforming them to accessible formats like Braille, local languages and easy to read summaries, potentially undermining the principles of “Nothing without us”. This oversight has resulted in many persons with disabilities, including those directly affected, being unaware of the Protection and Promotion of Persons with Disabilities Bill in South Africa.

Furthermore, this Draft Bill lacks clear assignments of responsibilities and mechanisms for coordination among national, provincial, and local authorities. Without actionable plans, budgets, timeframes, or targets, the Bill’s commitments may not translate into tangible improvements. The Bill also makes no reference to the effect of climate change. The Bill fails to explicitly address the unique needs of children with disabilities in early childhood (see clause 15 of the Bill), and does not establish a framework for early identification, assessment, and intervention, though it does mention early identification and intervention under the clause on habilitation and rehabilitation (clause 17(1)(d)). Finally, the Bill fails to make any reference to the effects of climate change on these children. Therefore, for the Bill and all its subsequent processes be effective, the consultation processes need to become more inclusive, a step that will ensure that all the voices are heard and represented in the final legislation.

5 The White Paper On the Rights of Persons with Disabilities (WPRPD)

2015:

The WPRPD's emphasis is on adopting programmes, laws, frameworks, and policies following a social model of disability to remove obstacles that obstruct children from accessing services. It aims to guarantee children are given the right to the resources they need to survive and grow to the fullest extent possible (Ally, Parker, & Peacock, 2022). Six different areas are identified that need improvement in support of people with disabilities, and a great emphasis is placed on early childhood development (Bekink, 2022). The White paper emphasises two main issues that are relevant to the current research in question. It prioritises ECD and inclusion for persons with disabilities.

On the issues of ECD, the white paper states that;

“Early childhood intervention is a broad term that describes a wide range of services that are offered to children who are at risk for developmental delays or who have disabilities, including support for their families.”

Second on inclusivity issues, the paper states that;

“Inclusion is regarded as a universal human right and aims at embracing the diversity of all people irrespective of race, gender, disability, or any other differences. It is about equal access and opportunities, and eliminating discrimination and intolerance for all. It is about a sense of belonging: feeling respected, valued for who you are; feeling a level of supportive energy and commitment from others so that you can best fully participate in society with no restrictions or limitations.”

However, it should be stated that, although children with disabilities are a priority, there are limited enabling actors on the ground, and some programmes and facilities are still not accessible (Anaby et al., 2013).

6 Education White Paper 6 Special Needs Education Building an Inclusive Education and Training System

Intentions to safeguard and make available the needs of young children including those with disabilities are provided for in the various laws, policies and plans which are integrated as embraced in the Education White Paper 5 (Department of Education,

2001a). The document emphasises the constitutionally guaranteed right of every child to quality education as it clearly outlines the guidelines for creating an inclusive education system that upholds the rights to access, meaningful and equitable education for children with disabilities (UNICEF, 2005). On the contrary, the fragmented approaches when departments focus on some needs of the children leave the implementation of the policies uncoordinated and unachievable, as concurs with Moodley & Storbeck and Moodley (2011), whose observation is that children with disabilities will always be short-changed. In summary, while the focus is on building education systems that are inclusive for learners with disabilities, it does not specifically address climate change issues.

7 The National Development Plan

South Africa's National Development Plan (NDP 2012), also recognises the hostile impacts of climate change on its development aspirations (National Planning Commission (NPC), 2012). South Africa has undertaken initiatives to deal with the concerns of global warming and to acknowledge, comprehend, and resolve the issues raised by climate change (Alexander, Nablamba, & Mubila, 2011). This is echoed in the National Climate Change Response Strategy as well as other environmental and developmental policy activities (UNICEF, 2011). However, it is unclear if these measures adequately address the requirements of the nation's young people. It is critical to acknowledge the connections and overlaps between broader development demands and climate change to comprehend how children are impacted by it locally (UNICEF, 2011). Climate change and development are mutually reinforcing in several ways as the changing climate poses a danger to sustainable development and the achievement of several important goals for development.

8 National Climate Change Response Policy (NCCRP)

The National Climate Change Response Policy (NCCRP) which was published as a White Paper in South Africa is a comprehensive framework that emphasises the importance of considering vulnerable groups, including children with disabilities, in climate change mitigation and adaptation strategies (Garland, 2014). However, there are concerns about the policy's focus on mental and occupational health, and its ability to reduce multidimensional inequalities among vulnerable populations (Khine, 2023).

The policy's adequacy for addressing the health needs of vulnerable groups is also questioned, with suggestions for better alignment with a "social determinants of

health” definition for climate vulnerability (Seidel, 2014). These determinants are shaped by various social, economic, and political factors and can have a substantial bearing on an individual’s health outcomes. Furthermore, the policy’s attention to the health needs and concerns of vulnerable groups is found to be lacking, with a call for more effective use of data and increased health-sector leadership (Chersich, 2019). The above discussions pay attention to the shortcomings of the intervention and make it clear that there has been insufficient mobilisation of resources to mitigate the negative effects and impact of climate change on children with disabilities.

9 Climate Change Act 22 of 2024

The Climate Change Bill 9 of 2022 did explicitly recognise the government's basic commitment to protect South Africans' constitutional rights, including for vulnerable persons, but did not use inclusive language when referring to persons with disabilities, only mentioning persons with physical disabilities. Notably, principle 3(f) stated:

“the need for decision-making to consider the special needs and circumstances of localities and people that are particularly vulnerable to the adverse effects of climate change, including vulnerable workers and groups such as women, especially poor and rural women, children, especially infants and child-headed families, the aged, the poor, *the sick and the physically challenged*”.

Section 15 of the Climate Change Bill stated that:

“If we do not take steps now to avoid these impacts (such as water scarcity, increased extreme weather events, and temperature increases), they will become significantly worse with devastating impacts, particularly in the poor and marginalised communities of South Africa, and for women and children”.

It should be noted that the Bill has since become law and the Climate Change Act 22 of 2024, however, is not yet operational.

V CLIMATE CHANGE VULNERABILITIES OF CHILDREN WITH DISABILITIES SOUTH AFRICA

Climate change is thought to be one of the most serious environmental issues, with severe effects on human health, and there is no dispute that climate change is a major environmental problem as well as a developmental challenge with several dimensions. Munasinghe (2010) describes climate change as an unparalleled problem for humanity because climate change has a severe influence on the world's socioeconomic growth. The devastating effects of climate change are being felt and experienced as the globe has not recovered from the COVID-19 pandemic (WHO, 2022). This prompted the creation of the 2030 Agenda for Sustainable Development (AfSD) as a response to

the disastrous effects of climate change, which are occurring at a time when the globe is also experiencing challenging social and economic development setbacks, whether they include environmental damage or the eradication of poverty. South Africa is not immune to this problem; it is reeling from the impact of global warming. Davis- Reddy and Vincent (2017) concede that this is a pressing global challenge with adverse results for human welfare, and the UN has declared it a 21st-century disaster (ibid).

In South Africa, climate change's impact on children with disabilities remains a complex issue. Lethoko (2016) emphasises the need for education on climate change in the school curriculum to empower children to become agents of change. Mathee et al (2018) underscore the importance of addressing environmental threats to children's health, which are exacerbated by climate change. Mathye and Eksteen (2016) shed a picture of the prevalence of childhood disabilities in South Africa and the need for appropriate health, diagnostic, treatment, and supportive services for these children. These studies collectively suggest that climate change exacerbates existing challenges for children with disabilities in South Africa and that a comprehensive approach is needed to address these issues.

According to (Sheffield and Landrigan 2011, Rylander et al 2013, and Son et al, 2017), children under the age of five are more vulnerable to the effects of heat exposure due to their underdeveloped ability to regulate body temperature. Thus, children in low-income environments with high temperatures may face even greater risks as they also contend with malnutrition and inadequate health systems, which may fail to offer protection against extreme heat conditions. This calls for robust turnaround strategies that seek to protect children with disabilities in South Africa. Efforts have been made and are still being made, yet the question is on the adequacy and effectiveness of the efforts made.

1 Physical Disabilities

Climate change is contributing to an increase in intensity and frequency of natural disasters and hazards such as storms, floods, and droughts. These disasters can disrupt the education system, damage school infrastructure, and displace students and teachers. Children with disabilities may face added challenges in evacuations, access to emergency services, and finding appropriate support during and after the disaster. It is crucial to note the plight of children living with disabilities in the rural areas of South Africa as they have a particular issue of compounded vulnerabilities.

While all children living in rural areas face adverse challenges such as poverty and the high rates of HIV/AIDS, this situation is worsened for children with visible physical impairment who are more vulnerable to these influences. A study by Ben-David and Nel (2013) indicated the adverse challenges of children living with physical disabilities. The study revealed that these children are affected by poverty, negative cultural beliefs, and a lack of adequate resources for their well-being. With regards to education, the policy is one of inclusion, but there seems to be little support from the government. According to Donohue and Bornman (2014), a widespread shortage of support and resources, combined with persistent negative attitudes toward disability, contributes to the ongoing challenges surrounding inclusion in South African Schools. This is mainly because, despite advocacy for inclusive education, learners with disabilities continue to be segregated from their non-disabled peers.

Clark et al's (2024) study revealed how issues on barriers to ECE access for children with disabilities in South Africa and Kenya can be contextualised within the growing impact of climate change on vulnerable children, in this case, ECD children living with disabilities. Thus, dealing with the intersection of climate change and disability in ECD is critical to ensuring that children with disabilities in South Africa and Eswatini are not left behind in the face of growing environmental challenges, which detrimental to their well-being

Climate change poses significant threats to education systems, particularly for children with disabilities, who often exist in an environment of compounded vulnerabilities. Thus, climate change-related disasters such as floods, droughts, and other extreme weather conditions can disrupt education systems, and infrastructure, displace communities, and perpetuate poverty. This disproportionately affects children with disabilities as they rely on specialised care services that are largely compromised and not prioritised during times of climate-induced disasters. Karisa et al (2022) examine the importance of improving access to ECD service access for children with disabilities in South Africa while highlighting the systematic challenges such as insufficient infrastructure, shortage of trained personnel, and limited parental support. The study's findings on the challenges encountered by children with disabilities when accessing ECD services can be contextualised within the broader impact of climate change on vulnerable populations.

2 Mental Health Impacts

Climate change has a profound impact on mental health because it disrupts social and economic institutions that people rely on for good health, including mental health (Atwoli et al, 2022). Globally, climate change has caused various long-term consequences on mental health, in both direct and indirect ways. Many apparent environmental tensions caused by climate change have a direct impact on brain function and psychological wellness, as evidenced by research findings that persons living in flood regions reported poor mental health in addition to the most frequently recorded health issues (Evans & Munslow, 2021). Most marginalised populations are more susceptible to climate-change-related health issues, including children, women, the elderly, the economically disadvantaged, emergency personnel, emergency personnel, the homeless, and those with previous mental illnesses (Dodgen, 2016). Notably, children with disabilities in many instances are the most affected and neglected in the event of weather-induced challenges.

Children with disabilities may experience heightened anxiety, stress, and trauma during climate-related disasters such as floods, storms, or wildfires. Disruptions to routines, displacement, and loss of support systems can exacerbate mental health challenges. Rother, et al. (2020) assert that the rise in extreme weather conditions can impact mental well-being, especially for children with disabilities relying on specific natural settings for therapy or sensory stimulation. Patel, et al. (2018) declare that while the mental health literature acknowledges the existence of environmental stressors and adverse challenges, there is limited emphasis on the effects of climate change in relation to extreme weather events.

Conveniently, the World Health Organization's Mental Health Gap Action Plan (2010) does not mention the issue of climate change as a risk factor. This shows that globally mental health is not considered to have a relationship with climate change and its effects, hence a situation where it is largely ignored and downplayed. The 2018 Lancet Commission on Mental Health and the Sustainable Development Goals (SDGs) draws the attention of the world to the great need to focus on the impacts of climate change on mental health. However, it should be noted that there is a gap in this call as the call to focus on the impact of climate change on children's mental health and well-being is missing.

However, it should be noted that South Africa has tried to address the mental health issues of children when it comes to issues with climate anxiety. Hickman et al (2021) state that efforts have been made to integrate climate change education into the school curricula, to empower students with knowledge and coping mechanisms. Furthermore, programmes that encourage proactive environmental action like community awareness programmes, have been promoted to help children turn climate anxiety into a constructive engagement.

VI COMPARING ESWATINI AND SOUTH AFRICA – OPPORTUNITIES AND CHALLENGES

Eswatini and South Africa are Southern African neighbours that share a lot in common and thus offer an interesting study of differences, each with its difficulties as well as opportunities. South Africa has a larger industrial base and a diverse economy, while Eswatini is smaller and has a unique cultural identity. Both countries have had adverse experiences with climate change-induced weather disasters. It is important to understand the connections and how the two neighbours leverage their strengths while addressing their distinctive problems in a dynamic regional landscape. The ensuing discussion will compare the two neighbouring countries, particularly focusing on the challenges children with disabilities are subjected to because of devastating natural disasters.

Article 24 of the UNCPRD enunciates issues to do with the right to education and mandates signatories to ensure that all education needs are suitable for children with disabilities. This aims to help them develop their potential and participation in society (Eide and Jele, 2011). The convention underscores the need to minimise or remove obstacles that may thwart children with disabilities from enjoying their right to education during natural disasters. Eswatini, as a signatory to the CRPD, consented to both the CRPD and its optional processes in 2012 (Mavundla, 2015). It is thus necessary for Eswatini to implement policy changes that prevent the rights violation for people with disabilities from being violated and to guarantee that these individuals have access to sufficient services. By creating the National Disability Policy of Swaziland in 2013, Eswatini fulfilled its commitment to the CRPD (Swaziland Deputy Prime Minister's Office, 2013). Eswatini also domesticated the CRPD in the Persons with Disabilities Act. However, the legislation does not mention climate change or the

right to a healthy environment, but does require the state to provide support in relation to accessibility and universal design.

Towards achieving the goals of the CRPD and, consequently, the Sustainable Development Goals (SDGs), the Kingdom of Eswatini has made some minor progress. Although there is a legal framework in place to support concrete actions, these have not been implemented effectively, (Swaziland Deputy Prime Minister's Office, 2016). The primary reason for this slow progress is the failure to operationalise the Persons with Disabilities Act of 2018, partly due to budget constraints (ibid). Additionally, traditional beliefs, the capacity of officials, and societal attitudes toward persons with disabilities are significant factors hindering the implementation of essential measures to improve the quality of life for people with disabilities, (Nkomo & Dube, 2020).

Eswatini may have a basic legislative framework that conforms with the CRPD, but in reality, there are insufficient practical initiatives. While a minimal CRPD-compliant statutory structure exists, concrete measures are still lacking. Furthermore, the Disability Council, which is a key component of the Act and is crucial to enhancing the circumstances to improve the conditions for persons with disabilities has not been established in Eswatini (Nkomo & Dube, 2020). It is submitted that these missing measures are crucial for advancing development and ensuring that children living with disabilities are guaranteed the right to participate fully and without barriers in everyday activities, including accessing ECD services. Persons with disabilities in Eswatini are continuously discriminated against and have limited access to fully participate in public and economic life, though the situation may seem to improve, in ECD centres inaccessibility in terms of infrastructure is an eye sore, and there is a growing need to support and upskill teachers working in inclusive environments, (Nkomo, 2022).

On the other hand, the signing and ratification of the UNCRPD by the South African government in 2007 validated its acknowledgement that persons with disabilities have rights that guarantee them non-discriminatory treatment. Lord and Stein (2008) further add that the agreement can be viewed as a changing point in the fight for disability rights as it gives member governments the chance to start policy change and reshape domestic legislation. The White Paper on the Rights of Persons with Disabilities (Disability Policy) was created and adopted in 2015, thereby adapting the UNCRPD to South African needs. Thus, it aspired to fulfil the goal of "inclusive and equitable socio-economic development," through accelerating the redress and change

of inclusion and equality for all children and people with disabilities throughout the nation (RSA 2016, 42). Nevertheless, it is noted that the laws, regulations, and initiatives on the rights of those with disabilities remain disjointed (Mall & Swarts, 2012).

Stein and Stein (2022a) recognized the inclusion and importance of people with disabilities in international climate change frameworks. However, they argued that the Paris Agreement violated established human rights obligations by not incorporating people with disabilities in its mitigation and adaptation efforts related to climate change, thus justice without them is not for them (ibid). In both countries, the implication is that justice for children with disabilities in fulfilling their fundamental rights to access early childhood services is not consistently afforded where climate change-induced weather patterns affect them. Stein and Stein (2022a) emphasise the urgent need for proactive justice that will empower children with disabilities to adapt to climate resilience attitudes that are effective, implementable, and accountable to them. It is critical to comprehend the relationship between disabilities and perceptions related to climate change-related risks and adaptations (King & Gregg, 2022).

VII CONCLUDING REMARKS

The two governments have attempted to promote the rights of children with disabilities at the ECD level, but there are substantial differences in legislation, policies, and implementation. Both Eswatini and South Africa should be aware that policies exist and are in place, as indicated by the preceding debates. The execution of these principles is of special relevance to effect change and create an effective education system that does not encourage segregation. Eswatini's inadequate resources and facilities make it challenging to deliver high-quality, equitable early childhood education for children living with disabilities, particularly in light of climate change problems. While Eswatini has a small number of specialist schools and insufficiently trained educators to cater to children with disabilities, South Africa has instructors and unique facilities prepared to cater to children with disabilities. Climate change policies in both nations do not address the needs of disabled children or their schooling, and in particular the situation of children in the early childhood phase.

CHAPTER FOUR

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

I INTRODUCTION

As the research was a review of climate change's impact on the education of children with disabilities in early childhood in Eswatini and South Africa, this chapter gives a synthesis of the research outcomes with the theoretical insights from the previous chapters. This is done to present an exhaustive overview of the findings which can be deduced from the discussions presented on the status-quo concerning the topic under study.

The chapter brings together facets from the global and regional contexts, national experiences, and theoretical underpinnings to have a clear understanding of the problem at hand. Lastly, the chapter also presents the opportunity for proffering recommendations related to practice and policy issues while emphasising inclusivity to counter and mitigate the negative impact of climate change on the vulnerable.

II REVIEW OF THEORETICAL FRAMEWORKS

To anchor the study, the Critical Disability Theory (CDT) was used to critically investigate how the systematic barriers perpetuate the vulnerabilities of children with disabilities in the context of climate change. The rationale behind this choice was based on the fact that the CDT highlights how societal and environmental systems are primarily responsible sources for exclusion rather than individual impairments. Furthermore, the Critical Disability Theory also aligns well with the disability human rights model as it underpins the interconnection between rights and the greater need for systems that are inclusive as a catalyst for equal participation. Thus, the Critical Disability Theory provided a solid anchor and foundation for analysing the connection between climate change, disability, and education.

Furthermore, the theoretical framework was crucial to the study as it underscored the intensified vulnerabilities faced by children with disabilities. The framework exposed how climate change amplifies the already existing inequalities and inequities, particularly where there is disability, poverty, and marginalisation. This is

mainly because, in communities where access to critical services like education, healthcare, and resources are limited, it becomes more pronounced when there is a climate change crisis. Thus, with such a status quo, the fundamentals of the framework emphasise the critical need for an all-around change and shifting of societal structures to prioritise inclusivity and resilience to climate change for this population.

III ADDRESSING THE RESEARCH QUESTIONS

The conception of the study sought to address three critical questions, mainly;

1 What Is the Global Impact of Climate Change On the Education of Children with Disabilities in Early Childhood?

At a global level, the findings from the study indicated how climate change was disproportionately affecting children with disability through the disruption of continuity in their education. This is mainly because extreme weather conditions triggered by climate change shocks, like floods and hurricanes, more than frequently destroy school infrastructure, leaving children without safe spaces for learning. The study also revealed that the already dire situation for children with disabilities is further aggravated by their need for and dependence on specialised services and resources which will be unavailable in times of emergency. The problem is also further worsened by the fact that these disasters also often lead to many displacements which further perpetuate exclusion for children with disabilities as the places of evacuation like temporary shelters and evacuation centres are not usually designed to accommodate the needs of such children thereby also further raising the issues of access, equity and equality at a global stage.

The current situation is against a background where there are international conventions like UNCPRD and the UNCRC, mandating the protection of education rights in emergencies. In contrast, the implementation of such conventions remains inadequate and in some extreme instances a pipe dream. In support of these findings, the research from the areas prone to disasters, persistently exposed the lack of adaptive technologies, and the lack of accessible evacuation plans, thereby highlighting the global gap in disaster preparedness.

2 What Are the Specific Impacts of Climate Change On the Education of Children with Disabilities in Eswatini and South Africa?

In assessing the impact of climate change on the education of children with disabilities in Eswatini and South Africa, the study revealed several findings. The recurring floods, droughts, and cyclones have often led to the disruption of education in Eswatini as they have led to infrastructural challenges, like inaccessible roads and poorly equipped schools. This is mainly when schools are destroyed combined with the fact that resources are already limited for rebuilding, resulting in the exclusion of children with disabilities especially when it comes to learning opportunities. These disruptions are detrimental for children with disabilities as they need specialised resources and support systems which are often unavailable in times of emergencies. Health-related risks like waterborne diseases and malnutrition further impact learning as they affect cognitive development through absenteeism. This is further exacerbated by the perpetration of existing cultural stigmatisation of disabilities thereby further resulting in the marginalisation of these children who are already not being prioritised when resources are being allocated (Amoadu et., al 2024).

South Africa has also not been spared as climate-induced disasters have wreaked havoc in the country through the destruction of infrastructure, especially in rural areas. This has led to scenarios where the affected families often withdraw their children from school due to the immense financial burden caused by the shocks. In the end, the most affected are children with disabilities as their education often comes with additional costs when factoring in issues of inclusivity and equity. The situation in South Africa is further worsened by the absence of recognition for children with disabilities in the national climate adaptation policies, exposing a crucial gap in targeted support and further perpetuating alienation and exclusion (Makwela & Smit 2022).

3 How Can Mechanisms and Interventions Mitigate the Impact of Climate Change On the Education of These Children in Eswatini and South Africa?

When it comes to how mechanisms and interventions can mitigate the impact of climate change, findings seem to suggest the magnitude of targeted interventions in addressing the multifaceted vulnerabilities of children with disabilities. Both in South Africa and Eswatini there is a need to make the education infrastructure more resilient

to climate-induced disasters in order to ensure the continuity of education as schools will remain operational even in adverse weather conditions.

The of lack inclusive climate adaptation frameworks still remain a challenge hence mechanisms and interventions can mitigate the impact of climate change on the education of these children in Eswatini and South Africa through the integration of disability inclusive policies into the national adaptation frameworks with explicit focus on issues of accessibility and support for children with disabilities in times of emergencies.

Furthermore, the findings also revealed the importance of community-based programmes to raise the needs and rights of children with disabilities as they are critical to putting a stop to the perpetuation of harmful stigmatising beliefs and crucial to fostering inclusive practices. The study also emphasised the importance of the use of capacity building mainly for policymakers and educators to equip them on dealing with inclusive education in emergencies.

IV NATIONAL EXPERIENCES: ESWATINI AND SOUTH AFRICA

When it comes to specific national experiences, the study also revealed that the contextually different, yet similar experiences in Eswatini and South Africa, underscore the systemic challenges of ECD children with disabilities in an environment with climate change. While the National Plan of Action for Children in Eswatini does acknowledge children's rights, it falls short as it does not give specific reference to disability and climate-related vulnerabilities. This is against a situation where there is rampant destruction of schools and transport systems during times of disaster, which affects the children in ECD with disabilities as well.

On the other and, while the NIEDCD policy and the Climate Act in South Africa (not yet operational) do demonstrate the commitment to sustainability and equity for all, it, however, falls short when looking at the intersectional issues of climate change, disability, and education. Furthermore, the economic impact of climate change is more evident in rural areas and children with disabilities in ECD end up being withdrawn from schools, exposing the need for well-articulated and inclusive policy frameworks.

The two governments have made some attempts to promote the rights of children with disabilities at the ECD level, but there are substantial differences in legislation, policies, and implementation. Both Eswatini and South Africa should be

aware that policies exist and are in place, as indicated by the preceding debates. The execution of these principles is of special relevance to effect change and create an effective education system that does not encourage segregation. Eswatini's inadequate resources and facilities make it challenging to deliver high-quality, equitable ECD for children with disabilities, particularly in light of climate change problems. While Eswatini has a small number of specialist schools and insufficiently trained educators to cater to children with disabilities, South Africa has instructors and unique facilities prepared to cater for children with disabilities in some instances but often congregated either in urban areas or situated far from families and communities. Climate change policies in both nations do not address the needs of disabled children or their schooling.

V RECOMMENDATIONS

In order for the two countries under study to efficiently mitigate the impact of climate change on children with disabilities in the ECD phase, the following recommendations were tabled;

1. The respective governments need to properly integrate disability issues in climate change adaptation plans, educational frameworks, and policies to ensure that they address the needs of children with disabilities in times of emergencies—integration should be in the form of an inclusive approach that is disability-centric.
2. Policy makers, educators, and community leaders should be capacitated on measures to implement for education in emergencies, emphasising dealing with children with disabilities in these climate-affected contexts.
3. Eswatini and South Africa need to align their national policies and legislation with international conventions to ensure the smooth domestication of minimum acceptable standards to international law obligations that address the cross cutting issues of climate change, disability, and education. This should also be followed up with clear mechanisms for monitoring to ensure and measure concrete implementation.
4. More disability disaggregated research with comprehensive data collection mechanisms is also required to further understand the impact of climate change

on children with disabilities to inform policy decisions. This may require empirical research to be undertaken.

5. The voice of children with disabilities in early childhood and their parents and caregivers, as well as that of Disabled Person's organisations is needed in drafting of law and policy reform and the monitoring of the implementation of these frameworks to mitigate climate change on children with disabilities.
6. Poor coordination between government departments (such as Education, Health, and Social Development) has led to fragmented service delivery. It is important to effect some changes to ensure the rights of persons with disabilities in early childhood education. This could take the form of detailed emergency plans for children with disabilities, disability-inclusive emergency shelters and home-based early learning programmes for children unable to reach ECD centres due to climate disruptions. The provision of child disability grants in areas affected by drought, flooding, and food insecurity is needed, and for children needing assistive devices, medical supplies, or climate-related relocation support.

VI CONCLUSION

The study's findings have led to several important conclusions. The different experiences in both Eswatini and South Africa highlight the fact that although climate change poses significant risks and has a negative impact on ECD children with disabilities, it also presents an opportunity for transformative change through the urgent need for inclusive and integrated approaches to tackling the effects of climate change, disability and education at large.

Therefore, the findings in the study lead to several conclusions that can be made. Firstly, there are significant gaps in the implementation of policies at both the national and global levels. This is mainly due to the fact that, while international frameworks mandate the protection of children's disability rights, the domestication and implementation remain weak and inconsistent as both Eswatini and South Africa have shown shortcomings in the integration of specific disability-specific issues in the climate adaptation plans and education policies as well as legislation which further exposes and alienates the already vulnerable ECD children with disabilities.

Secondly, it is evident from the research findings that climate change presents

disproportionate impact on children with disabilities which further worsens the current situation by perpetuating the existing barriers to education and adding on new issues that hinder development and work against principles of inclusion. Without urgent and targeted intervention measures, children with disabilities in ECD face further marginalisation and other insurmountable challenges whose effects will be felt for many years to come.

Thirdly, the findings also present the need for urgent collaborative approaches to this problem, as it is a cross-cutting issue. Collaborative approaches will ensure that countries adopt disability-inclusive measures to climate change and adaptation in education systems resulting in more resilient and equitable systems. This requires collaborative efforts from private and public sectors and also the communities as it ensures that the rights and well-being of this group of vulnerable children are upheld.

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Last appendix: Ethical Clearance Certificate.



Dr Novuyo Nkomo (222069427)
School Of Law
Howard College

Dear Dr Novuyo Nkomo,

Original application number: 00024770

Project title: A review of climate change impact on the education of children with disabilities in early childhood in Eswatini and South Africa.

Exemption from Ethics Review

In response to your application received on 26 November 2024, your school has indicated that the protocol has been granted EXEMPTION FROM ETHICS REVIEW.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.

In case you have further queries, please quote the above reference number.

PLEASE NOTE:

Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,

Mr Matthew Blain Kimble
pp Academic Leader Research
School Of Law

UKZN Research Ethics Office
Westville Campus, Govan Mbeki Building
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Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

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