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1. Introduction

UNICEF Philippines is pleased to submit the following *amicus curiae* brief to the Honourable Commission on Human Rights of the Philippines with a view to assisting the Commission in its *National Inquiry on the Impact of Climate Change on the Rights of the Filipino People and the Responsibility therefore of the “Carbon Majors”*. In particular, this brief seeks to inform the Commission’s investigations by highlighting the specific vulnerabilities of children to the impacts of climate change in the Philippines, and the wide-ranging implications for their rights, as laid down in the UN Convention on the Rights of the Child.

The brief draws on the UNICEF Philippines’ recently-completed Climate Landscape Analysis for Children in the Philippines – the first study of its kind – as well as other relevant national reports, research and frameworks, scientific evidence, and guidance from the UN Committee on the Rights of the Child and other human rights mechanisms.¹

**UNICEF’s Mandate and Role**

UNICEF is an agency of the United Nations devoted to serving the world’s children, focusing particular effort on reaching the most vulnerable and marginalised children. We are present in 190 countries and territories and our mandate is to uphold children’s rights as set down in the UN Convention on the Rights of the Child, the most widely-ratified international human rights treaty in the world.

UNICEF began providing assistance to the Philippines in November 1948. Since then, we and the Philippine government have been partners in protecting Filipino children. In 1990, the Philippines became the 31st State to ratify the Convention. The Convention establishes legally and morally binding obligations on every State Party to undertake all appropriate legislative, administrative and other measures for the implementation of the rights that the Convention enshrines.

UNICEF has identified climate change as one of the greatest threats to children’s fundamental rights and wellbeing, and recognises that addressing this global challenge will be vital for building a more sustainable future for children.¹ Accordingly, UNICEF Country Offices around the world are mobilising to incorporate climate change and the provision of a safe and clean environment for children in their programmes and operations.

¹ This brief was prepared by Joni Pegram on behalf of UNICEF Philippines.
2. Children and Climate Change: an Overview

Children, particularly the most disadvantaged, are acutely vulnerable to the impacts of climate change, and face heightened and specific risks compared to the wider population as a whole. This can be attributed to three key factors: firstly, that childhood – particularly between birth and the age of five – represents a unique stage of physiological and mental development. As a result, children experience distinct and disproportionate harm from climate-induced changes in their environment, including impacts with potentially lifelong consequences.

Secondly, children make up one of the largest groups affected by climate change, as many of the countries identified as most vulnerable to its impacts, such as the Philippines, are also those in which children tend to account for a large share of the overall population. Projected demographic trends are expected to further consolidate this situation. While all children will ultimately suffer from the risks of climate-induced harm, not all children are affected equally. Zones most at risk from disasters and climate change impacts frequently overlap with areas of high poverty, exacerbating inequality and further undermining the ability of poor children to cope and take advantage of opportunities.

Finally, despite being least responsible for the causes of climate change, it is children and future generations that will bear the heaviest burden of our inadequate action to tackle climate change, since they will live longer, and face more profound, widespread and recurrent crises as the impacts of climate change escalate over time.

The Philippines vividly illustrates this convergence of children’s vulnerabilities: the country is consistently ranked among the top five countries most vulnerable to climate change impacts, and also has a large child population. Between 1997 and 2016, the Philippines experienced 289 weather-related events, greatly exceeding the number of events experienced by any other top ten most vulnerable country over the same period. In 2015, 38 per cent of the population was under the age of 18, and 11 per cent was under the age of 5, while the population is expected to grow by a further 1.4 per cent each year between 2015 and 2030. Furthermore, the majority of Filipinos live in the immediate vicinity of the coast and other low-lying areas, highly exposed to increasingly intense storms and storm surges, as well as an observed sea level rise that is more than twice the global average.
3. The UN Convention on the Rights of the Child and Climate Change

3.1 The role and responsibilities of State Parties

The UN Convention on the Rights of the Child (Convention) is one of the few human rights instruments to explicitly recognize the importance of a healthy environment in the context of the rights that it enshrines, and to place obligations on States in this regard. This occurs in two places; Article 24(2) on the right of the child to the enjoyment of the highest attainable standard of health provides that:

“States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures: […] to combat disease and malnutrition […] taking into consideration the dangers and risks of environmental pollution.”

And Article 29(1) on the aims of education states that:

“States Parties agree that the education of the child shall be directed to: […] the development of respect for the natural environment.”

In this sense, the Convention articulates the fundamentally interdependent nature of the relationship between environmental and child rights protection – a relationship that has been overlooked for too long by both States and other actors, but which is at last the subject of increasing recognition at both international and national levels.

The UN Committee on the Rights of the Child (the Committee) has aided this process by providing further guidance in interpretation of these articles with respect to climate change specifically. In its General Comment on the right of the child to the enjoyment of the highest attainable standard of health, the Committee states that:

“Environmental interventions should, inter alia, address climate change, as this is one of the biggest threats to children’s health and exacerbates health disparities. States should, therefore, put children’s health concerns at the centre of their climate change adaptation and mitigation strategies.”

And in a growing number of Concluding Observations, the Committee has emphasized climate change as a serious impediment to the ability of State Parties to make progress in implementing the Convention, linking its adverse effects to, inter alia, the right to education (Article 28), adequate housing (Article 27), and health, safe drinking water and sanitation (Article 24). Since then, the Committee has gone further still, acknowledging that “almost all the substantive rights of the child may be affected by climate change”, and affirming that States must take into account the rights and best interests of the child when determining which mitigation and adaptation measures to pursue.

The Committee has issued a number of pertinent recommendations to countries, primarily concerning adaptation interventions such as the need to mainstream child-specific and child-sensitive risk and vulnerability reduction strategies into national climate and disaster risk plans; to raise awareness and preparedness for climate change through education, and to increase the physical safety and resilience of school infrastructure; to strengthen social safety nets more broadly; and to seek international cooperation in implementing these recommendations. More recently, the Committee has also addressed States’ obligations to prevent causing, or contributing to, transboundary harm through their climate mitigation strategies, while the outcome report from their 2016 Day of General Discussion recognized
that protecting children’s rights from global climate change would require “urgent and aggressive reductions in greenhouse gases, guided by the best available science”.  

Although the Committee has not explicitly addressed climate change in its State reviews of the Philippines to date, its Concluding Observations in both 2005 and 2009 expressed concern regarding environmental problems in the country with clear climate dimensions, highlighting in particular the serious consequences for children’s health and development resulting from air and water pollution and environmental degradation, and regional disparities with regards to access to safe drinking water and sanitation. In 2009 the Committee further noted the Philippines’ particular vulnerability to natural disasters, and called on the State to develop and implement an action plan or strategy on assistance and protection of children affected by these events – a step that the Philippines has subsequently taken through the Children’s Relief and Protection Act 2016 (see section 3.3 below). The Committee also called on the Philippines to continue to strengthen implementation of domestic environmental laws, to increase children’s knowledge of environmental health issues by introducing dedicated education programmes in schools, and to take effective measures to improve access to safe drinking water and sanitation facilities – particularly in rural areas and slums.

3.2 The role and responsibilities of the private sector in relation to child rights and climate change

The Committee has also provided guidance with regard to the role of the private sector and environmental harm, recognizing that environmental degradation and contamination resulting from business activities can undermine a range of children’s rights. In its General Comment No 16, the Committee states that:

“Environmental degradation and contamination arising from business activities can compromise children’s rights to health, food security and access to safe drinking water and sanitation.”

The General Comment is equally clear that States must require businesses to undertake mandatory child-rights due diligence in order “to ensure that business enterprises identify, prevent and mitigate their impact on child rights including across their business relationships and within global operations.”

The Committee further notes that States should ensure children’s access to effective redress mechanisms for violations of their rights resulting from business activities, including those caused by business enterprises extraterritorially “when there is a reasonable link between the State and the conduct concerned”. This guidance has obvious implications for the role and responsibilities of businesses in relation to their contribution to climate change and its severe impacts on child rights, both at home and abroad, and particularly as attribution models become increasingly sophisticated. In this regard, the Committee also highlights the role that agencies with oversight powers relevant to children’s rights, including national human rights institutions, can play in providing remedies, through, for example, proactively investigating and monitoring abuses, and imposing sanctions on businesses which infringe on children’s rights, where they have regulatory powers that enable them to do so.

The Committee underlines that redress mechanisms should take into account the fact that children’s specific vulnerabilities can mean that violations of their rights can be irreversible and result in life-long – and even transgenerational – consequences, and that reparation should therefore be timely to limit ongoing and future damage to the child or children affected. The Committee provides the example that if children are identified as victims of
environmental pollution, then “immediate steps should be taken by all relevant parties to prevent further damage to the health and development of children and repair any damage done”. In the context of climate change, preventing further damage to children’s rights will entail, amongst other measures, ambitious mitigation action by all relevant actors, and notably the business sector, in order to curtail warming to no more than 1.5°C above pre-industrial levels, as called for in the Paris Agreement.

Indeed, it is clear that the impacts of climate change on child rights directly trigger the human rights responsibilities of companies such as the ‘Carbon Majors’ themselves, as elaborated in the UN Guiding Principles on Business and Human Rights. The implications of the latter for child rights specifically are further elucidated in the Children’s Rights and Business Principles, which clarify that businesses should respect and support children’s rights in relation to the environment, including by: a) ensuring that business operations do not adversely affect children’s rights through damage to the environment or by reducing access to natural resources; b) taking measures to reduce greenhouse gas emissions from company operations and promoting sustainable resource use; and c) identifying opportunities to prevent and mitigate disaster risk and to support communities in finding ways to adapt to the consequences of climate change.

3.3 Recent progress in recognizing child rights in climate-relevant frameworks

Despite this body of guidance, children’s rights, and human rights more broadly, continue to remain largely absent from efforts to tackle climate change. The Convention is overlooked in designing and implementing climate-related policies and standards at the international, regional and national levels, while child-focused policies and legislation frequently fail to take account of the impacts and risks of climate change. However, the importance of child rights in the context of climate change is explicitly recognised in the Paris Agreement under the UN Framework Convention on Climate Change (UNFCCC), representing a major advance. The Agreement calls on States to “respect, promote and consider” their respective obligations on the rights of children and intergenerational equity in the context of climate action. The Philippines played an important role in championing and securing this landmark language, including in its capacity as chair of the Climate Vulnerable Forum, and as a member of the Geneva Pledge for Human Rights in Climate Action.

In parallel, other major international frameworks also recognise that tackling climate change and development are intrinsically linked, incorporate human rights as guiding principles, and place emphasis on children’s particular needs and vulnerabilities, as well as their role as agents of change. The 2030 Agenda for Sustainable Development calls on States to ensure that all learners acquire the knowledge and skills required to promote sustainable development (SDG 4.7), and to “promote mechanisms for raising capacity for effective climate change-related planning and management” including by focusing on youth (SDG13). The Sendai Framework for Disaster Risk Reduction states that “children and youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction”. Further progress is required however, to operationalise these commitments at the national and local levels, and to ensure that the principle of the best interests of the child is integrated throughout climate change, disaster risk reduction, and sustainable development action.
In the Philippines, all climate change plans and programmes are required to be “pro-children” under the Climate Change Act (Republic Act 9729), yet in practice child-specific vulnerabilities and priorities remain insufficiently addressed, both in the National Framework Strategy on Climate Change 2010-2022 and in the National Climate Change Action Plan 2011-2028 (NCCAP).\textsuperscript{25} Neither the initial and second communications to the UNFCCC, nor the Philippines’ Nationally Determined Contribution (NDC) refer to children. On the contrary, the Children’s Emergency Relief and Protection Act of 2016 provides a global standard for protecting children during emergencies and disaster situations, such as those encountered in the aftermath of Typhoon Haiyan. The Act provides for specific measures to protect and educate children in these contexts, to ensure their participation in relevant decision-making processes, and to improve data collection.\textsuperscript{26}

In child-relevant sector policies and strategies, progress is similarly mixed. Although there is some recognition of children’s vulnerability to climate change, for example, in the National Climate Change Adaptation in Health Strategic Plan,\textsuperscript{27} and in the NCCAP which acknowledges the need to integrate climate change into primary and secondary education curricula, learning materials and teacher training, there is a continuing need for this to be concretely translated into programmes and investment.\textsuperscript{28}

Existing good practices of integrating child rights in climate action illustrate the myriad benefits of doing so, and UNICEF is working with Governments around the world to implement such child-centred national laws, consultations and initiatives.\textsuperscript{29} In Madagascar, for example, a comprehensive child-focused approach to disaster risk reduction – incorporating a range of interventions including integration of DRR in education curricula and teacher training, strengthening early warning systems, and constructing cyclone-proof classrooms using low-carbon technologies – has contributed to no child dying in a school setting as a result of floods and cyclones since 2006.\textsuperscript{30} In Zambia, the “Unite4Climate” initiative supports the training of 200 children each year to become climate ambassadors, supporting them to use media, debates, peer-to-peer education and advocacy efforts to engage their communities and leaders on the issue of climate change, as well as the implementation of low-cost community adaptation and mitigation projects. To date, more than 1000 ambassadors have reached over a million children, youth and community members.

In the Philippines itself, the success of initiatives led by the National Youth Commission such as the National Day for Youth in Climate Action, clearly demonstrates the immense mobilization potential of children and youth in fostering awareness and debate among the general public, undertaking action themselves, and contributing to the Government’s formal negotiating position in advance of international climate talks.\textsuperscript{31} Furthermore, UNICEF has been assisting the government to implement innovative community-based participatory 3D mapping exercises in which children work alongside other community members to develop models of their villages and to identify climate-related hazards such as floods and storm surges. Children help to establish baseline data and to point out hazard-prone areas, such as houses made of light-weight materials or households with persons with disabilities. The project has allowed for the risk-mapping of some of the most hazard-prone villages in the country, while building a common understanding among community members of the risks at hand. This demonstrates how children have a critical role to play in building their own and their communities’ resilience to the impacts of climate change, when equipped with the skills and means to do so.\textsuperscript{32}
4 The Impacts of Climate Change on the Rights of Children in the Philippines

The below is intended to illustrate how the impacts of climate change in the Philippines are already undermining various child rights laid down in the Convention, recognizing that these are interdependent and interrelated. The section also explores how these infringements are likely to become increasingly severe in the context of future climate projections.

4.1 Rights to Life, Survival and Development

As average global temperatures increase, deaths and injuries from increasingly intense climate-related disasters rise, as do mortality and morbidity linked to drought, heat waves, flooding, disease and malnutrition. The Intergovernmental Panel on Climate Change has stated that the consequences of even a 2°C rise in temperature will place children at particularly acute risk. In the Philippines, a 2°C rise is likely to be catastrophic for children’s fundamental rights. An observed mean annual temperature increase of 0.010°C (or 0.65°C rise in total) over the period 1951-2010 is already associated with an increase in the intensity of storms, a rise in the variability of rainfall patterns and more frequent and intense extreme rainfall events, more hot days and warm nights, longer drought episodes, and more frequent forest fires. Further projected changes will heighten these impacts, and are also expected to lead to longer and hotter heatwaves, more floods, landslides and mudslides resulting from more intense storms and the increase in rainfall they bring, more intense storm surges, and threats arising from sea level rise, ocean acidification, and salinization of soil and freshwater resources.

In every instance, children – particularly young children – are among the most susceptible. In the context of extreme weather and floods for example, many children lack the strength to stay on their feet in the face of fast currents, even in shallow water. Strong currents and debris in the water put them at high risk of injuries and drowning. In November 2013, Typhoon Haiyan devastated much of the Visayas, inflicting significant damage in Region VIII where the Typhoon first made landfall. While the country has many measures in place to deal with the estimated 7 to 9 typhoons affecting the Philippines each year, Haiyan was the strongest ever tropical storm to make landfall, and traditional coping mechanisms were overwhelmed. More than 14 million people were affected, including 5.9 million children. Coastal and inland areas of Leyte, Samar, Eastern Samar, northern Cebu and Panay Island were hardest hit, compounding the plight of some of the most vulnerable communities in the Philippines in which 40 per cent of children were living in poverty even prior to the typhoon. While information on the final child death toll is not available, the Government confirmed a total of 6,300 fatalities across the country, of which 92 per cent occurred in Leyte. According to the 2010 census, children aged 10 to 14 years comprised the largest age group in this province, followed by those in age groups 5-9 years and 0-4 years. Drowning and trauma were found to be the principle causes of most deaths.

Similarly, during heatwaves, infants and young children are also more likely to die or suffer from heatstroke than adults, due to their inability to regulate their body temperature and control their surrounding environment, and their heightened sensitivity to dehydration and contaminated water. Children under 12 months are particularly vulnerable. Extreme heat also affects children through a variety of heat-related illnesses. One recent study found that over the past decade, Manila and Tuguegarao have already experienced heatwaves on 100 days per year, and suggests that areas of the Philippines such as Mindanao could face up to 300 heatwave days per year by 2050, under a business-as-usual emissions trajectory.
4.2 Right to Health

As outlined in section 3, the Convention on the Rights of the Child expressly connects the right to health with the environment, and the Committee has described climate change as “one of the biggest threats to children’s health.” Due to their unique stage of physical and psychological development, all children are exceptionally vulnerable to the impacts of climate-related stresses, which pose severe and far-reaching threats to their physical and mental health. Young children, particularly between birth and the age of 5, are at particular risk due to their less developed physiology and immune systems.

Disease, safe drinking water and nutrition

According to the World Health Organization (WHO), infectious and vector-borne diseases, exposure to flooding due to sea level rise, heat-related deaths, and under-nutrition are all priority health issues for the Philippines in a changing climate, in addition to ambient and indoor air pollution.

Rising temperatures are lengthening the transmission season and expanding the geographic range of vector-borne diseases, including malaria, dengue fever, Zika and Japanese encephalitis. The global burden of these climate-sensitive diseases is already heavily concentrated on children – 70 per cent of all deaths from malaria in 2015 for example occurred in children under the age of 5, and the World Health Organization projects that climate impacts will cause an additional 60,000 deaths from malaria among children globally under the age of 15 by 2030. In the Philippines, malaria is currently endemic in more than 57 provinces, affecting predominantly poorer communities in remote locations. By 2070, the WHO projects that over 150 million people will be at risk of malaria in the Philippines, under both high and low emissions scenarios. In addition, a spread in dengue fever outbreaks has also been observed in recent years, including a 30 per cent increase in cases in Manila and the Cordillera Autonomous Region.

Children are also highly susceptible to many infectious water-borne diseases that become more prevalent in the context of drought, floods and extreme weather, particularly when damage to essential water and sanitation infrastructure occurs. According to UNICEF/WHO Joint Monitoring Programme estimates, 6.66 per cent of the population remains reliant upon unimproved or surface water, predominantly in rural areas, while per capita water availability in the Philippines is the second lowest among Southeast Asian countries, and significantly lower than the world average. By 2025, water availability is projected to be marginal in the majority of big cities, as well as in 8 of the country’s 19 principle river basins. Consumption of contaminated water increases the incidence of diarrhoea, the fourth leading cause of death of under-5 year olds in the Philippines. Although the total number of diarrhoeal deaths in Filipino children under the age of 15 is projected to decline over time, the WHO projects that the share of those attributable to climate change could increase from 7.7 per cent in 2030 to 11 per cent by 2050.

Children’s access to adequate nutrition is severely threatened by climate change, which will significantly affect crop production, food availability and household income, leading to increased malnutrition and worsening rates of stunting, wasting and micronutrient deficiency, particularly among poor communities. Children are once again at heightened risk as they need to consume more food per unit of body weight than adults, leaving them more vulnerable to deprivation of food. Undernutrition exacerbates the severity of a range of diseases, and is responsible for almost half of worldwide deaths of children under the age of 5. The WHO estimates that climate change will lead to nearly 95,000 additional deaths per year in children aged 5 years or less globally by 2030 due to under-nutrition. Furthermore, undernutrition during the first two years of life can lead to irreversible stunting, affecting...
physical and cognitive development, with long-term implications for a child’s educational outcomes, health and future livelihood.70

In the Philippines, the prevalence of underweight children under five worsened from 2008 to 2015,71 and statistically significant increases in both stunting (to 33 per cent) and wasting (to 7.1 per cent) were observed between 2013 and 2015, reversing previously downwards trends.72 Household income was reported to be one of the main predictors of stunting in children,73 and in a country where agriculture employs approximately 30 per cent of the workforce74 – including 57 per cent of the employed poor75 – children living in households reliant on the agricultural sector are acutely vulnerable. Even a 1°C increase in temperature is projected to result in a 10 to 15 per cent drop in agricultural production in the country,76 with knock-on effects in terms of increased food prices likely to be felt by the urban poor as well. Similarly, climate impacts are projected to severely affect the fishing sector, another major economic sector in the Philippines, with significant consequences for food security, livelihoods and the health of children.77 Overall, modelling suggests that an estimated additional 70,000 Filipino children will be malnourished by 2050 due to the impacts of climate change; an increase of 4 per cent.78

Mental health

The impacts of climate change can have a profoundly negative effect on children’s mental health. Children that have experienced life-threatening situations and witnessed deaths and injury during and in the aftermath of extreme weather events have a higher chance of developing post-traumatic stress, anxiety disorders, suicidal thoughts and depression.79 The impacts of disasters have also been linked to a reduction in cognitive functioning among children, which is turn is associated with a corresponding increase in the risk of developing future mental health problems.80 Heightened stress in households due to loss of family livelihoods, as well as actual or feared separation from families, the loss of loved ones, and separation from communities and traditional land due to the impacts of climate change are also potential sources of severe mental health problems among children.81

Following Typhoon Haiyan, tens of thousands of Filipino children required psychosocial support, and mental health issues were identified as one of the key barriers preventing an early return to education.82 Furthermore, increased temperatures and poor air quality in urban areas have been linked to alterations in behavioural patterns that can increase stress levels among inhabitants, including a reduction in outdoor activities and recreation.83 In addition to risks to their health, this has implications for children’s right to rest, leisure and play, as well as their capacity to fulfil their right to develop respect for the natural environment.

Air pollution

Although air pollution is not caused by climate change, some forms of air pollution cause climate change, and climate change can exacerbate some forms of air pollution such as ozone, which is both a potent greenhouse gas and a powerful respiratory irritant that can cause lung inflammation and exacerbate respiratory illnesses affecting children.84 Indeed, air pollution from indoor and outdoor sources is one of the leading causes of child deaths globally, playing a direct role in causing pneumonia and other respiratory diseases that account for almost one in 10 under-five deaths.85 Other impacts identified include early foetal loss, premature birth, low birthweight, and increased prevalence and incidence of childhood asthma,86 in addition to impacts on cognitive development due to pollutants crossing the blood-brain barrier.87 For example, studies have shown that pregnant women’s exposure to polycyclic aromatic hydrocarbons, a pollutant associated with fossil fuel combustion, affects the white matter of the foetus’ brain significantly, with consequences for future developmental delays, lower verbal IQ and increased signs of anxiety, depression and attention deficits.88
Other studies have found associations between air pollution and lower attendance and academic achievement rates in school.\textsuperscript{89}

Children are more susceptible to air pollution than adults as their lungs, brains and immune systems are still developing and their respiratory tracks are more permeable. Young children also breathe faster than adults, take in more air relative to their body weight, and are more likely to spend longer periods of time outdoors and to engage in vigorous activities. The most socially and economically disadvantaged, who already tend to have poorer health and inadequate access to health services, are the most vulnerable.\textsuperscript{90}

Acute respiratory infection has been identified as one of the top three causes of under-5 child mortality in the Philippines,\textsuperscript{91} with 46 per cent of these deaths attributed to indoor household pollution largely caused by the burning of solid fuels such as firewood and coal for cooking and heating.\textsuperscript{92} Outdoor air pollution is caused by forest fires, slash-and-burn agriculture, waste-burning and transportation.\textsuperscript{93} Preliminary studies suggest that urban poor children in informal settlements and indigenous children from rural areas are the most affected by dirty air, although evidence and analysis is lacking.\textsuperscript{94} In Manila, the annual average of fine particulate matter (PM 2.5) stands at 17µg, 70 per cent higher than levels recommended by the WHO.\textsuperscript{95} Studies have found that, along with jeepney drivers, children in Manila face the greatest exposure to vehicular pollution, with a particularly high prevalence of respiratory symptoms found among child vendors.\textsuperscript{96}

In the context of rapid urbanisation, climate-related increases in temperature and the incidence of wildfires, challenges in enforcing national air quality standards, and a lack of provision for more sustainable alternatives to the principal sources of indoor and outdoor air pollution, increasing numbers of children will be at risk – both from the direct and immediate impacts of pollutants on their health, and as a consequence of their overall vulnerability to the impacts of climate change, to which many of these emissions simultaneously contribute.

### 4.3 Right to Education

Climate change has been recognised as an emerging and persistent barrier to achieving universal education attainment in the Philippines.\textsuperscript{97} The impacts of climate change on children’s right to education are manifold, including extreme weather events that destroy infrastructure and disrupt school attendance, inadequate nutrition undermining children’s ability to concentrate, loss of school days due to climate-related physical and mental health impacts, and links between climate pressures on household incomes, low educational attainment, and higher dropout rates.\textsuperscript{98}

Typhoon Haiyan damaged or destroyed almost 3,200 schools and day care centres, while a large number of schools were taken over as evacuation centres, resulting in a sudden disruption in education for more than a million pre-school and school-age students.\textsuperscript{99,100} In addition to these challenges, additional barriers for children resuming education included displacement, the cost of transport and replacing materials, and psychological trauma.\textsuperscript{101} More broadly, the Government has identified damages incurred from disasters as one of the key causes of a shortage of classrooms and school materials, citing these shortages as critical challenges to the Philippines’ educational system.\textsuperscript{102}

Studies conducted elsewhere have demonstrated a clear correlation between the impacts of climate-related disasters and young children’s cognitive capacity, including effects on language development, memory and spatial reasoning.\textsuperscript{103} In addition, for children displaced or otherwise severely affected by climate-related events, behavioural issues and negative impacts on attendance, performance, suspension, expulsion and drop-out rates have been observed, even several years after the event has taken place.\textsuperscript{104} Although enrolment rates in
primary education in the Philippines are high, completion rates are low, and as many as 2.85 million children aged 5-15 remained out of school in 2015-2016, many from segments of the population living below the poverty line. The role of climate change in exacerbating inequities is only likely to heighten the barriers that these children face. For those in school, low student performance persists, a problem that has been linked to both school-related expenditures and an increasing number of students seeking employment in order to augment family income. These factors are also likely to contribute to low enrolment rates and particularly poor educational outcomes at secondary level, particularly among boys, who make up the majority of children engaged in child labour (see section 4.5). It is likely that the significant additional pressure placed on households by climate-related events and stress plays a role in preventing children from enjoying their right to education.

Climate-related pressures on household incomes can also contribute to a decision to migrate by one or both parents, leading to negative effects on the overall wellbeing, and notably the educational outcomes, of children left behind. In particular, the absence of mothers has been associated with a negative effect on children’s educational performance. This is a particularly pertinent issue in the Philippines, where approximately 10 per cent of the country’s workforce is employed abroad. The majority of these migrants are women, and many have children that are not permitted to accompany them. Research suggests that Filipino children are up to 5 per cent more likely to experience educational impairments when their mothers migrate abroad than if their fathers move, and that boys are significantly more affected than girls.

4.4 Right to an Adequate Standard of Living

Children’s right to an adequate standard of living is inextricably linked to their access to safe housing. Increasingly severe and frequent flashfloods and landslides, intense storms, and exposure to sea level rise and storm surges, particularly in low-lying coastal areas and along river lines, undermines this right, with disproportionate impacts on the poor and those living in informal settlements.

Since 2008, an average of 3.7 million disaster-induced displacements have been recorded in the Philippines each year, of which 84 per cent are attributed to typhoons and storm surges, floods and the strong winds that usually accompany them. Typhoon Haiyan represented the single largest event, partially or completely destroying more than 1.1 million homes. Some four million people were displaced when the storm hit, including 1.7 million children, and six months later, more than two million people still lacked adequate shelter or durable housing, including over 26,000 people living in temporary shelters. As of end 2016, approximately 880,000 people were still without permanent housing, with thousands returning to establish makeshift homes in highly-exposed coastal slums, including precarious ‘no-dwelling zones’. Children living in these circumstances face particularly acute threats to their rights, including severe impacts on their health and education, and increased risk of violence, exploitation and abuse, particularly when they have been separated from their families and support networks.

In addition to climate-related disasters, slow-onset processes will also have significant impacts. In the future, sea level rise in the Philippines is projected to exceed the global average by between 10 to 20 per cent, and to lead to almost 1 million people being affected by flooding between 2070 and 2100 in the absence of considerable mitigation and adaptation action. Ultimately, estimates suggest that 13.6 million people could be forced to relocate altogether. Furthermore, while an estimated 385,000 Filipinos are currently affected by inland river flooding each year, an additional 187,300 Filipinos are expected to be at risk as a result of climate change by 2030, with associated heightened challenges
for children, including risk of drowning, displacement and extensive health impacts resulting from disease, deprivation of access to food and safe water, and trauma.

### 4.5 Right to Protection from Violence, Exploitation and Abuse

The stresses that climate change places on livelihoods and communities have been linked to an increase in children’s exposure to exploitation, violence and abuse, including as a result of child labour, early marriage, sexual violence and child trafficking, with heightened risks likely to be experienced by girls and children displaced or migrating in the context of climate-related disasters.\(^{120}\)

Increasing pressure on livelihoods in rural areas as a result of climate change will increase poverty in the Philippines, which in turn is expected to push more children into labour – including its most hazardous forms – with direct impacts on children’s attendance at school, safety and wellbeing.\(^{121}\) According to the 2011 National Survey on Children, 2.1 million Filipino children were considered to be engaged in child labour in 2011, of which 98 per cent were engaged in its most hazardous forms, and 60 per cent were engaged in the agricultural sector.\(^{122}\) Following Typhoon Haiyan, a spike in the number of children migrating to cities in order to search for work was also observed.\(^{123}\)

In the context of climate-related disasters, a combination of widespread confusion, economic vulnerability, and separation from family members can create the conditions for child trafficking to thrive.\(^{124}\) Trafficking and other forms of gender-based violence were among the most acute risks faced by women and girls in particular in the wake of Typhoon Haiyan,\(^{125}\) including those living in reportedly overcrowded evacuation centres.\(^{126}\) Areas heavily impacted by the typhoon, and overlapping with high levels of child poverty, were already known “hot-spots” for trafficking of women and girls, even prior to the disaster,\(^{127}\) illustrating how climate-related stress not only creates, but further exacerbates the conditions in which violations of children’s rights can occur.

### 4.6 Right to Protection from Conflict

There has been increasing scrutiny of the way in which the impacts of climate change act as a ‘threat multiplier’ in relation to conflict, due to its role in compounding and exacerbating other political, social and economic sources of tension,\(^{128}\) with catastrophic consequences for a broad range of children’s rights.\(^{129}\)

In the Southern Philippines, and particularly Mindanao, children have been severely afflicted by long-standing armed conflict and clan feuds. These are responsible for displacing more than 251,000 people in 2016 alone,\(^{130}\) and are associated with disrupted access to children’s access to education and other basic services, along with experience of violence, loss of family members, and a litany of grave violations.\(^{131}\)

Children in these conflict-affected communities are also facing exposure to some of the most severe climate-related changes in the Philippines; Mindanao is expected to experience some of the most rapid increases in temperature over coming decades, including longer and hotter heatwaves. This, combined with a projected decrease in annual average rainfall in the south, will greatly exacerbate the risk of drought, particularly during El Nino years.\(^{132}\) Furthermore, many of Mindanao’s inhabitants, including the majority of the population of the Autonomous Region in Muslim Mindanao (ARMM), live in the immediate vicinity of the coast and are therefore highly exposed to sea level rise and storm surges.\(^{133}\)

Livelihoods that are highly dependent on fragile and climate-sensitive natural resources, combined with the highest levels of poverty and lowest levels of human development in the
Philippines, render the population highly vulnerable to these impacts, while severely limiting their resilience and capacity to adapt. As climate change impacts escalate, these multiple layers of vulnerability are only likely to entrench and fuel existing drivers of conflict between people and groups, particularly those pertaining to control over access to natural resources. An example of how these factors converge can already be observed; in 2016, water and food shortages resulting from El-Nino-induced drought, and exacerbated by the conflict between government and armed groups, led to violent protests in Mindanao. In the absence of significant investment in child-focused resilience and adaptation, the outlook for securing and upholding the rights of these children caught up in a perfect storm of climate risk and conflict – and already amongst the most marginalised – is particularly bleak.
5 Disproportionate impacts on children in vulnerable situations

The UN Human Rights Council has recognized that the worst effects of climate change are experienced by those who are already vulnerable “owing to factors such as geography, poverty, gender, age, indigenous or minority status, national or social origin, birth or other status and disability”\(^\text{137}\) The Fifth Assessment report of the Intergovernmental Panel on Climate Change similarly recognizes that those who are “socially, economically, culturally, politically, institutionally or otherwise marginalized are especially vulnerable to climate change”.\(^\text{138}\) While children per se, and particularly young children, must be considered a disproportionately vulnerable group in the context of climate change due to their unique stage of development and specific needs, certain subsets of children may be considered at heightened risk. According to the UN Office of the High Commissioner for Human Rights, “the negative impacts of climate change will disproportionately affect poor children, indigenous children, minorities, migrants and other children on the move, children with disabilities and others in vulnerable situations. Girls also face heightened risks…”\(^\text{139}\)

In the Philippines, there is considerably uneven performance in meeting children’s rights for particular groups of children, notably children living in poverty, children living in rural locations and informal urban settlements, children with disabilities, and children from indigenous communities – all of whom experience significant gaps in their access to services and in meeting key development targets across a range of key outcome areas.\(^\text{140}\) Climate shocks and stress will increase this inequity.

The following seeks to highlight some of these disproportionate impacts of climate change on girls, indigenous children, the urban poor, and children with disabilities, within the limiting constraints of available evidence, data and research. It is by no means exhaustive.

5.1 Girls

Research suggests that girls are more likely to lose out on education, rest, play and leisure when households are affected by climate change pressures, as they are frequently responsible for performing time-consuming chores such as cooking, gathering fuel and collecting water.\(^\text{141}\) Furthermore, girls are more likely to become the victims of trafficking, gender-based violence, prostitution, sexual exploitation and child marriage in the context of both climate-related disasters and increasing pressure on household incomes, with severe implications for their rights to health, education and freedom from violence, exploitation and abuse.\(^\text{142}\) Girls have also been found to suffer disproportionately during droughts due to reduced water availability and food insecurity.\(^\text{143}\) Many of these impacts have been documented in the Philippines and are explored in the preceding section.

One recent study suggests that typhoons in the Philippines can lead to dramatic spikes in the mortality rate for infant girls up to two years after the disaster. Post-typhoon mortality among baby girls was found to be approximately 15 times higher than the average number of deaths due to typhoon exposure recorded by the Government, most likely due to indirect effects of the storm in exacerbating poverty and dramatically reduced spending by households as a coping mechanism.\(^\text{144}\) The study estimates that these deaths could account for as much as 13 per cent of overall infant mortality. No similar increase in the mortality rate for baby boys was found. The authors suggested that the finding was unlikely to be due to families intentionally allowing girls to die, but that the correlation could be linked to parents believing that newborns could cope with higher-than-average levels of neglect, combined with potentially unconscious behavior in providing more or different food and care to baby boys than girls. The risk of a baby girl dying was found to double if she had older sisters in the home, and to double again if she had older brothers, suggesting that competition for resources among siblings may play an important role.
5.2 Indigenous children

Climate change poses an existential threat to the specific rights of indigenous children, due to their unique connection with the environment and its resources, and the intimate relationship between their traditional land, culture, spiritual beliefs, and collective identity. Moreover, indigenous children’s vulnerability is further exacerbated because they frequently live in areas characterized by highly climate-sensitive ecosystems and are typically among the most marginalised groups in society, estimated to constitute 15 per cent of the world’s poor, and one third of those living in extreme poverty in rural areas.

It is estimated that there are between 14 and 17 million Indigenous Peoples in the Philippines. Mindanao, where 61 per cent of Indigenous Peoples are estimated to live, represents 31 per cent of total poverty incidence in the country. While recent data on poverty levels and other key indicators among indigenous communities is lacking or considered to be unreliable, the latter are reported to represent the very ‘poorest of the poor’, and the areas in which they live tend to be characterised by poor health, nutrition and educational outcomes for children. As described in the preceding section, Mindanao also faces some of the most severe projected impacts of climate change in the Philippines, and these impacts will be felt most acutely by indigenous children due to their dependence on their ancestral lands and natural resources, combined with a lack of adaptive capacity. According to a recent study commissioned by UNICEF Philippines and the Tebtebba Foundation, climate change and environmental degradation represent two of the major concerns for indigenous children in the Philippines. However, given indigenous peoples’ continued socio-economic exclusion and political disempowerment, significant barriers are likely to remain with regards to indigenous children’s ability to exercise their right to be heard on these issues.

5.3 Urban poor children

Urban poor children face particularly acute climate-related hazards. In 2014, 38 per cent of the urban population lived in slums, and children living in these informal settlements, particularly along river lines and by the coast, are highly-exposed to typhoons, storm surges, seasonal rains and coastal erosion. Their vulnerability is further compounded by their poverty and other typical characteristics of informal urban settlements, including a lack of access to basic services such as health and education, congested housing and transportation, inadequate waste management, poor water and air quality, and an absence of decent and safe public spaces.

Rapid urbanisation in the country will further increase these pressures, with the proportion of the population living in urban areas expected to increase to 56.3 per cent by 2050. This increase is being fuelled in part by increasing rates of internal migration that are highly characterised by young persons moving from rural areas to urban centres in search of increased economic opportunities. In the light of both observed and projected climate-related impacts on rural livelihoods and levels of poverty, this trend seems likely to accelerate over time, bringing ever-greater numbers of children into harm’s way.

5.4 Children with disabilities

Children with disabilities are one of the most marginalized and excluded groups in society, and encounter some of the largest barriers to realizing their rights. Frequently, a lack of accurate data and information about children with disabilities hampers governments’ abilities to allocate resources and support. According to the 2010 national census, 1.44 million Filipinos, or 1.57 per cent of the population was living with some form of disability, and 18.9
per cent of these were aged 14 or younger. However, this figure is significantly lower than the estimated global average of 15 per cent, as well as WHO estimates for the country, and UNICEF Philippines estimates that the number of children with disabilities could be as high as 5 million. Challenges in the fulfilment of the rights of children with disabilities in the Philippines include a lack of data, and limited access to inclusive health, education and socio-cultural services. Children with disabilities are also more likely to encounter discrimination and stigma, as well as physical abuse and neglect.

Climate change threatens to compound these inequities, including through higher exposure to climate risk and lower adaptive capacity linked to children with disabilities’ relative poverty and socio-economic exclusion. During emergencies, for example, children with disabilities are rendered highly vulnerable due to insufficient consideration of accessibility in planning for evacuation, response and relief efforts, leading to higher risk of injuries, disease and death. They may have more difficulty in reaching safe areas and in reuniting with families and friends due to communication and mobility barriers. They may also lose vital assistance devices, and are more likely to encounter challenges in accessing critical information. According to a disabled people’s organisation in Iloilo, local contingency plans for Typhoon Haiyan did not make accommodation for the needs of persons with disabilities, including provisions for accessible shelters, with subsequent implications for their access to food and other basic assistance.
6 Future Generations and considerations of Intergenerational Equity

The disproportionate impact of climate change on children and other vulnerable groups raises fundamental questions of climate justice, fairness, equity and access to effective remedy, including judicial and other redress mechanisms. These concerns also apply to future generations, who, like children, have contributed the least to greenhouse gas emissions, and yet will encounter more severe violations of their rights than current generations, while being least able to exercise their right to be heard and participate with regards to key decisions affecting them. In addition, while the worst impacts of climate change will be felt in the future, the ability of future generations to hold those responsible to account will be limited due to the time lag between cause and effect. Children already face major barriers in asserting their right to access effective remedy in any setting, but many of these challenges are magnified in the context of environmental issues, due to, *inter alia*, complexity in linking specific harm to the actors whose activities are responsible, the burden of proof required, restrictive limitation periods, and onerous financial costs. Moreover, by the time tipping points are reached, children growing up today and future generations may face a significant additional challenge in seeking effective remedy for climate harm – namely, that many of the actors responsible, particularly in the private sector, may have ceased to exist altogether due to fundamental shifts towards a low carbon global economy.\(^{166}\)

The Convention on the Rights of the Child considers that children are rights holders from birth, but as the UN Special Rapporteur on Human Rights and the Environment has stated, ‘future generations are being born every day’.\(^{167}\) Applying a child rights-based approach to climate change mitigation and adaptation efforts – notably by taking into account the best interests of the child – holds the key to providing adequate protection of both children and future generation’s rights. This involves, notably, affirmative action by States to take urgent and ambitious measures to curb temperature rise to no more than 1.5°C above pre-industrial levels, including through adequately regulating the emissions of businesses, as well as focusing adaptation efforts on reaching the most vulnerable children. Critically, it necessitates empowering children to exercise their right to be heard and to participate meaningfully in the design and planning of these measures, including through the provision of environmental education – as enshrined in Article 29 of the Convention – and effective consultative mechanisms. It also involves guaranteeing that children have access to effective remedies for climate harm, including as a result of business activity. Addressing the rights and best interests of the child in this manner would provide a powerful means for serving long term needs over short term interests, providing children with the tools to become critical agents of change and defenders of their environmental rights for both current and future generations. Underpinning these steps will be the need to collect child-specific disaggregated data, and to mobilize resources for effective climate action, both domestically and through international cooperation.

Positive steps and commitments towards bridging States’ obligations under the Convention and other relevant frameworks have already taken place at the international level, including in the Paris Agreement, the 2030 Agenda for Sustainable Development, and the Sendai Framework for Disaster Risk Reduction, as set out in section 3.3.

Furthermore, at the national level, the Philippines has a progressive record in recognizing intergenerational equity in environmental matters. Children in the Philippines filed some of the earliest environmental protection cases in 1993 to challenge the destruction of rainforests, both on their own behalf as well as that of future generations, and the ruling in their favour by the Supreme Court continues to be regarded as an exemplary example of
best practice worldwide. Furthermore, the Philippines has committed to integrate climate change into primary and secondary education curricula, learning materials and teacher training, and the Children’s Emergency Relief and Protection Act is held up as a global model of legislation reflecting the best interests of the child. Moreover, the ongoing groundbreaking inquiry by the Honourable Commission on Human Rights to which this amicus curiae brief is intended to contribute, explicitly recognizes the heightened vulnerability of children to the effects of climate change, as well as the particular importance of access to justice and effective remedy to youth petitioners.

A number of other encouraging advances in recognizing intergenerational justice concerns brought by children also provides grounds for optimism, including the Our Children’s Trust case (Juliana vs United States of America) in which legal action is being pursued by youths aged between 10 and 21 against US government agencies in various states over insufficient action to secure a stable climate for all generations, on the basis that their rights to life, liberty and property are at stake. The District Court ruled in favour of the youth plaintiffs that the case could proceed, citing jurisprudence from the Philippines Supreme Court’s decision mentioned above in support of its decision. The trial date has been set for February 2018. In 2015, the Hague District Court in the Netherlands ruled in favour of the Urgenda Foundation, representing multiple generations of citizens, to impose a more ambitious target for the reduction of greenhouse gas emissions on the Government, including on the grounds of human rights law.

These cases have spawned similar legal efforts by, and on behalf of, children in multiple countries around the world. For example in India, a 9-year-old has filed a petition against the Government for failing to fulfil its duties to her and the Indian people to sufficiently mitigate climate change, including on the grounds of intergenerational equity and India’s constitution, and for non-implementation of national environmental laws. In Pakistan, the Supreme Court has allowed seven-year-old Rabab Ali’s constitutional climate case on behalf of present and future generations to proceed against the federal and provincial governments of Pakistan. The petition asserts that by continuing to exploit and promote fossil fuels, the latter have violated the Public Trust Doctrine and the youngest generation’s fundamental constitutional rights to life, liberty, property, human dignity, information, and equal protection under the law. In the Eastern District of Pennsylvania, two children aged 7 and 11 have filed a lawsuit against the Government for attempting to roll back the Clean Power Plan, a package of rules designed to reduce greenhouse gas emissions. Other cases are ongoing or being prepared in Australia, Belgium, Canada, England, France, Norway, Portugal, Uganda and Ukraine. These cases indicate the potentially powerful role of strategic litigation and the judicial system in raising up children’s voices, and protecting children’s rights from activities which result in immediate and longer-term harm.
7 Conclusion

This brief has sought to inform the Honourable Commission’s investigations by highlighting the significant and wide-ranging child rights violations resulting from the impacts of climate change, in light of the specific rights laid down in the UN Convention on the Rights of the Child. There can be no doubt that children are among the most vulnerable to these impacts, due to their particular status, unique stage of physiological and emotional development, and inevitable prospects of experiencing escalating and recurrent climate-related impacts during their lifetimes, leading to even more severe and pervasive infringements of their rights in future. The rights of children in vulnerable situations are of particularly acute concern.

These violations clearly engage the child rights obligations of States, including with regard to the role and duties of the private sector in contributing to climate-related harm. The Convention itself provides a clear framework in this regard, while the Committee on the Rights of the Child has set out key interpretive guidance, further embedded in major international frameworks to which the Philippines is a signatory, and in national level policies and legislation as well. The Committee has highlighted the critical role that agencies such as the Commission can play in providing remedies for children for harm encountered due to business activities in particular. Furthermore, these violations directly trigger the human rights responsibilities of the ‘Carbon Majors’ themselves, including as they relate to preventing harm and actively safeguarding child rights.

Finally, the brief has considered the situation of future generations in the Philippines and the question of intergenerational justice, highlighting the necessity and key elements of a child rights-based approach to climate action in ensuring that the rights of children and future generations alike are upheld. By adopting this approach and the best interests of the child as a primary consideration in its investigation, the Commission has a unprecedented opportunity to set a worldwide benchmark for championing children’s rights in the context of climate change, building on the Philippines’ progressive record in this area, and bolstering ongoing endeavours around the world more broadly.

UNICEF Philippines stands ready to support the Commission in its efforts, in line with its mandate, and drawing on its long-standing experience and work to protect the rights of every child in the Philippines.
1 UNICEF (2015), Unless we act now: The impact of climate change on children, page 6
2 Ibid
3 Germanwatch, Global Climate Risk Index 2018 for the period 1997-2016: https://germanwatch.org/en/14638
4 Ibid. Only weather related events (storms, floods, as well as temperature extremes and mass movements (heat and cold waves etc.)) are incorporated, while geological incidents such as earthquakes, volcanic eruptions or tsunamis, are omitted. Germanwatch notes that “this event-related examination does not allow for an assessment of continuous changes of important climate parameters” such as substantial impacts arising from long-term declines in precipitation.
6 Ibid.
7 UK Met Office (2016). Projections of mean sea level change for the Philippines
8 UN Committee on the Rights of the Child (2013), General Comment No. 15 on the Right of the Child to the Enjoyment of the Highest Attainable Standard of Health (Art. 24), paragraph 50.
9 See e.g. CRC Concluding Observations on Jamaica (2015); Saint Lucia (2014); Tuvalu (2013).
12 Ibid.
14 Republic Act No. 10821, 2016: http://www.officialgazette.gov.ph/2016/05/18/republic-act-no-10821/
15 UN Committee on the Rights of the Child (2013), General Comment 16: State obligations regarding the impact of the business sector on children’s rights
16 Ibid.
17 Ibid, para 44
19 UN Committee of the Rights of the Child (2013), General comment 16, Op Cit. para 30
20 Ibid., para 31
21 The Child Rights and Business Principles were developed by UNICEF, the UN Global Compact and Save the Children, representing the first comprehensive set of principles to guide companies on the full range of actions they can take to respect and support children’s rights: http://childrenandbusiness.org/
26 Submission from the Philippines to the Office of the UN High Commissioner for Human Rights for the Analytical Study on the Relationship between Climate Change and the full and effective enjoyment of the Rights of the Child: http://www.ohchr.org/Documents/Issues/ClimateChange/RightsChild/Philippines.pdf
27 2014-2016 National Climate Change Adaptation in Health Strategic Plan (CCAH). The Strategic Plan states that vulnerable groups, including pregnant women and infants “should be mapped out and their special needs identified” (p.46) in order to address climate change impacts on their health through community-based interventions: http://www.doh.gov.ph/sites/default/files/publications/National_Climate_Change_Adaptation_in_Health_Strategic_Plan_2014-2016.pdf
31 Although the results are location-specific, a toolkit has been produced to be used as a guide for other communities that may wish to adopt this approach. See also https://www.youtube.com/watch?v=QyH8htOsSMk
Surface water, 5.94% on other unimproved sources (6.66% in total), while 93.3% have access to

western North Pacific. See e.g. Sobel et al., Human influence on tropical cyclone intensity,
a result of anthropogenic climate change, with upward trends observed in particular in the North Atlantic and
western North Pacific. See e.g. Sobel et al., Human influence on tropical cyclone intensity, Science 15 Jul 2016,
Vol. 353, Issue 6296, pp. 242-248; Kerry A. Emanuel, Downscaling CMIP5 climate models shows increased


Ibid.


Leyte’s population went up to 1.6 million (results from 2010 Census of Population and Housing), July 2013: https://psa.gov.ph/content/leyte-population-went-16-million-results-2010-census-population-and-housing


Ibid.


UN Committee on the Rights of the Child (2013), General Comment No. 15, Op.Cit


World Health Organization UNFCCC Climate and Health Country Profile – 2015 Philippines:
http://apps.who.int/iris/bitstream/10665/208868/1/WHO_FWC_PHE_EPE_15.14_eng.pdf?ua=1


WHO, Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050s (2014).


WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, Estimates on the Use of
water, sanitation and hygiene in Philippines: https://washdata.org/data#/phil, broken down as follows: 0.72% are
reliant on surface water, 5.94% on other unimproved sources (6.66% in total), while 93.3% have access to
improved water sources.


Wastewater management in the Philippines, Environmental Management Bureau (April 2015):


Ibid.
WHO. Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050s (2014).


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Ibid.


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UNICEF Philippines, ‘Scaling up climate change action for Children in the Philippines through evidence-based advocacy and pilot adaptation and mitigation interventions’, October 2017 (internal document)


Unicef UK (2013), Climate Change: Children’s Challenge


According to IDMC, 40% of all evacuation centres were located in schools at the beginning of the emergency, although the percentage of internally displaced persons residing in schools decreased rapidly from 40% in December to 14% by the end of April the following year. IDMC, May 2014, The Evolving Picture of displacement in the wake of Typhoon Haiyan: An Evidence-Based overview (p.29): http://www.internal-displacement.org/library/publications/2014/the-evolving-picture-of-displacement-in-the-wake-of-typhoon-haiyan-an-evidence-based-overview/


Second National Communication to the UNFCCC, Op.Cit


Unicef UK (2017), No Place to Call Home: Protecting Children’s Rights when the Changing Climate Forces them to Flee, p.15


Second National Communication to the UNFCCC, Op.Cit
Oposa v. Secretary of the Department of Environmental and Natural Resources

generation and for succeeding generations, file a class suit [...]


Ibid.


Ibid.


OHCHR (2017), Analitical study on the relationship between climate change and the full and effective enjoyment of the rights of the child, Op.Cit


See e.g ‘Climate Justice: The international momentum towards climate litigation’ (2016), which draws similarities between the fossil fuel industry and the challenges faced by those seeking reparation for harms from the asbestos industry, due to the time lag between profits and harm caused: [https://www.ourchildrenstrust.org/us/federal](https://www.ourchildrenstrust.org/us/federal)

UN Special Rapporteur John Knox, 24 June 2016, UCL, available at [https://mediacentral.ucl.ac.uk/Play/5163](https://mediacentral.ucl.ac.uk/Play/5163)

The court found ‘no difficulty in ruling that they [the petitioners] can, for themselves, for others of their generation and for succeeding generations, file a class suit [...]’ in order to protect the rain forest. See Minor Oposa v. Secretary of the Department of Environmental and Natural Resources [1994] 33 ILM 173.

Climate Change Act and NCCAP.


See Our Children’s Trust, Global Legal Actions: [http://ourchildrenstrust.org/legal/international](http://ourchildrenstrust.org/legal/international)

[See:](https://www.ourchildrenstrust.org/us/federal-lawsuit)