



MINISTRY OF PLANNING AND INVESTMENT



CLIMATE LANDSCAPE ANALYSIS FOR CHILDREN IN VIETNAM



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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AFD	French Development Agency
CCA	Climate Change Adaptation
CCKP	Climate Change Knowledge Portal
CCRA	Child-Centred Risk Assessment
CCWG	Climate Change Working Group
CLAC	Climate Landscape Analysis for Children
CPD	Country Programme Document
CSO	Civil Society Organization
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAPRO	East Asia and Pacific Regional Office
EE	Environmental Education
FAO	Food and Agriculture Organization
FSC	Forest Stewardship Council
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse Gas
GIZ	German Agency for International Cooperation
GoV	Government of Viet Nam
Ha	Hectare
HCMC	Ho Chi Minh City
HFMD	Hand-Foot-Mouth Disease
ILO	International Labour Organization
INGO	International Non-Governmental Organization
IPCC	Intergovernmental Panel on Climate Change
ISPONRE	Institute of Strategy and Policy on Natural Resources and Environment
Km	Kilometre
LEP	Law on Environmental Protection
LULUCF	Land Use, Land-Use Change and Forestry
MARD	Ministry of Agriculture and Rural Development
Mm	Millimetre
MOET	Ministry of Education and Training
MOH	Ministry of Health

MOIC	Ministry of Information and Communication
MOIT	Ministry of Industry and Trade
MOLISA	Ministry of Labour, Invalids and Social Affairs
MONRE	Ministry of Natural Resources and Environment
MPI	Ministry of Planning and Investment
MW	Megawatt
NAP	National Adaptation Plan
NAPCC	National Action Plan on Climate Change
NCCC	National Committee on Climate Change
NDCs	Nationally Determined Contributions
NGO	Non-Governmental Organization
NPAC	National Programme of Action on Children
NSCC	National Strategy on Climate Change
NSGG	National Strategy on Green Growth
NTP	National Target Programme
PIPA	Plan for Implementation of the Paris Agreement
RCP	Representative Concentration Pathway
SBCC	Social Behaviour Change Communication
SDG	Sustainable Development Goal
SEDP	Socio-Economic Development Plan
SEDS	Socio-Economic Development Strategy
SLRs	Sea Level Rises
SNV	Netherlands Development Organisation
TNA	Technology Needs Assessment
UN	United Nations
UN CRC	United Nations Convention on the Rights of the Child
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations Children's Fund
VDMA	Viet Nam Disaster Management Authority
VEA	Viet Nam Environment Administration
VIHEMA	Viet Nam Health and Environmental Management Agency
VNCC	Viet Nam National Committee on Children
VND	Viet Nam Dong
WASH	Water, Sanitation and Hygiene
WB	World Bank
WHO	World Health Organization

FOREWORD: IT IS NOW FOR OUR CHILDREN

Environmental health shapes child health, educational achievement and well-being in profound ways. In this report, UNICEF discusses six key influencers of environmental health which alone and in combination have a dramatic impact on the health and development of every child. These are:

- a) Environmental risks – air pollution, including from burning of crops and garbage, globally kills hundreds of thousands of children under 5 each year and contributes to chronic respiratory infections, breathing problems, lung disease, cancer and other diseases.
- b) Environmental degradation – resulting from poor land use and over use; burning of crops; deforestation and biodiversity loss etc, as well as extreme weather events – which severely affect children, affect the safety of their food and water, and the cleanliness of the air they breath.
- c) Toxic metals – lead, mercury, cadmium, and arsenic are examples of common toxic metals that impair children’s development. 1 in 3 children worldwide are estimated to have lead poisoning.
- d) Hazardous waste – poor household waste management, landfills, waste dumped in waterways, unsafe burning of waste including e-waste, results in toxins in the air and water poisoning children, impairing their health and development
- e) Toxic chemicals – a wide range of toxic chemicals, including fertilizers and pesticides still in use in Viet Nam can damage the health of children and women
- f) Climate change – is a major threat to children’s health – this includes increased frequency, intensity, and uncertainty of extreme weather events; extreme heat, and effects on natural systems.

And all of the above significantly contribute to the greatest threat facing our children and their future prosperity:

Efforts to maximize child survival, health and wellbeing are incomplete if they do not address the environmental determinants of child health.

This paper will focus on the challenge of this century – climate change. And it will highlight the importance of action – today – to protect this and future generations of children from the growing threats that they face. Children are more susceptible to the impacts of climate change and environmental degradation than other age groups, largely attributed to their stage in growth and development, dependence on others and lack of voice in decisions that affect them. The paper concludes crucial action is needed by Government, by UNICEF and partners that focuses specifically on children, that takes bold action today, to not only save our children for tomorrow’s world, but to save the world, Viet Nam, for our children and future generations.



EXECUTIVE SUMMARY



Viet Nam is one of the most vulnerable countries to climate change in the world.

Contributing to climate change, and dramatically impacting children's health and wellbeing are a number of practices which if addressed would immediately have a positive affect on the health and development of the children of Viet Nam. These include poor land use and overuse, unregulated use of toxic pesticides and fertilizers that often also make their way into the foods and the water that people use to drink, cook and clean; unnecessary burning of crops and solid waste; and a reliance on 'dirty' energy sources such as coal rather than moving the country to more green energy sources. Children are more susceptible to the impacts of climate change and environmental degradation than other age groups, largely attributed to their stage in growth and development, dependence on others and lack of voice in decisions that affect them. Despite some recognition of children in climate change policy and strategies in Viet Nam, there are notable gaps in child-specific references across the national legal and policy landscape. There are also relatively few legal instruments that recognize children's rights in relation to climate change to express their views and to participate. Viet Nam is a signatory to several global policies, including the Paris Agreement under the UN Framework Convention on Climate Change (UNFCCC) and Agenda 2030 of the Sustainable Development Goals (SDGs), which play key roles in the well-being of people and the environment.

Recognizing the importance of addressing climate change challenges for children and youth in Viet Nam, the *Climate Landscape Analysis for Children* (CLAC) was commissioned by the Ministry of Planning and Investment (MPI) and UNICEF Viet Nam. The purpose of the CLAC is to

conduct a baseline situation analysis of climate-related issues affecting children to inform the development of Socio-Economic Development Plans (SEDP) and other climate change-related policies with a more child-centred approach for the period 2021-2030. However, further to consultations with different stakeholders, this analysis attempted to address some environmental issues. The intended audience of the CLAC includes: i) key Government of Viet Nam (GoV) stakeholders involved in socio-economic and climate change policy, ii) development agencies with a climate change and environment mandate, including UNICEF Viet Nam and iii) private sector and civil society organization (CSO) partners. The analysis is based on a comprehensive desk review of relevant documents and interviews with key stakeholders at national level and selected ones at sub-national level.

Environmental degradation in Viet Nam, often made more acute by climate change, also has severe consequences for children.

Viet Nam's economy is still heavily dependent on fossil fuels and as a result, it will continue to be a major regional greenhouse gas (GHG) emitter, as well as major contributor to air pollution, unless replaced by renewable energy. There are strong associations between hospital admissions for lower respiratory infections and daily levels of air pollution. Water pollution is associated with persistent diarrhoea and water-borne diseases that are also more prevalent. The loss of biodiversity takes away important recreational, cultural and spiritual benefits – all of which are important for children's development. These critical services are often not considered as countries grow economically.

Key biophysical climate change hazards in Viet Nam are variable rainfall, increased temperatures, sea level rises (SLRs) and extreme weather events and related disasters. All have secondary impacts: flooding and landslides, biodiversity loss, drought, saltwater intrusion, storm surges and typhoons. These impacts then have tertiary impacts: decreased agricultural yields, compromised infrastructure of schools and homes, water scarcity, poor water quality and migration, which then impact children in different ways.

Viet Nam is experiencing higher incidences of flooding and drought as well as higher temperatures, SLRs and demand for water.

The frequency of flooding in Viet Nam increased during 1990-2010. The World Bank's Climate Change Knowledge Portal (CCKP) shows that Viet Nam has extremely high exposure to flooding. The country also experienced a severe drought in 2015-2016, its worst in 90 years that affected more than two million people (520,000 children) in 52 of its 63 provinces. The annual average temperature in Viet Nam increased by approximately a half degree Celsius during the last 50 years and is projected to rise further. The average water level over coastal areas in Viet Nam increased by approximately 3.5mm/year and in some coastal areas, saltwater intrusion extended up to 90km inland causing river water to be too salty for human or animal consumption, for crop irrigation and fish-farming.

According to the World Health Organization (WHO), more than 88 per cent of diseases attributable to climate change occur in children younger than five years of age.

Food security for children is threatened by impacts on the agricultural sector, ranging from complete crop failure to chronically reduced yields and lower income for families. Children are particularly vulnerable to food insecurity, as periods of undernutrition can contribute to delayed development, lower school attendance due to lower household income and increased vulnerability to non-communicable diseases later in life. Children in rural areas are particularly

at risk from water-borne diseases, which can increase due to excessive rains and localized flooding. Indications are that the incidence of dengue fever is increasing in Viet Nam and is projected to become worse. Higher temperatures contribute to an increased risks of dengue, diarrhoea, hand-foot-mouth disease (HFMD) and higher hospitalization rates, especially among children and the elderly. The Water, Sanitation and Hygiene (WASH) sector is also affected in many ways by climate change, including negative impacts on water availability and quality for drinking and domestic use.

Children's education and learning outcomes are impacted by climate change.

Drought and associated water and food scarcity can affect learning attainment, as the number and quality of meals available to children reduces in families, and if the quality and quantity of water available at schools is diminished. A higher incidence of heat-related diseases along with heat stress can reduce a child's capacity to learn and affect teachers' ability to instruct in the classroom. Children's education is also affected by the loss or damage to school infrastructure which often results from extreme flooding and can cause schools to close. Climate change-related disasters can contribute to increased school drop-outs, general under achievement and failure.

Climate change is recognised as a major driver of migration, where existing livelihoods are lost or negatively impacted by the severe weather events and for survival people feel compelled to move in search of work. Studies have also shown that when parents are forced to migrate to find work, **there is a greater incidence of child neglect and abuse as well as increased school drop-out rates.** In cases of displacement and migration, girls have been found to be at increased risk of violence and exploitation. Displacement or disruption of home, school or normal routines may cause children and youth to suffer from mental health and psychosocial distress.



Cash transfers is a core building block of risk-informed and shock responsive social protection. There is a compelling normative and financial case to ensure Viet Nam continues to invest in children even in times of crisis – cash assistance can prevent children from dropping out of school, missing routine health services, skipping meals, exposure to violence, and, at the same time, ensure a generation of healthy and skilled workers. In 2017, the GoV approved the “*Master Plan on Social Assistance Reform and Development in the period 2017-2025 with vision to 2030*” (MPSARD) that is comprised of regular and emergency cash assistance. A key challenge to Viet Nam’s existing emergency cash assistance is that it focuses mainly on short-term emergency relief immediately after natural disasters through in-kind aid and limited cash. Meanwhile, regular social assistance policies are fragmented and lack an emergency clause to ‘flex’ the existing schemes to covariant risks, such as climate change, economic crises and pandemics.

An analysis of **current gaps in policy and strategies in Viet Nam for the inclusion of climate change impacts on children** reveals few GoV policies explicitly recognize children’s issues, they include the National Strategy on Green Growth (NSGG), Nationally Determined Contributions (NDC), National Strategy on Climate Change (NSCC), among others. Aside from referring to children as a vulnerable group, policies and strategies do not recognize or make concessions for children nor do they enable child and youth participation in issues that affect them the most.

There are several identified opportunities to work with key policies to support interventions that focus on children and their vulnerability to climate change impacts and environmental degradation. Plans for water security and water source management, under the NSCC for 2021-2030, can expand the issues from agricultural production towards community-level issues,

including child health and WASH benefits. There are many potential areas for integrating the interests and vulnerabilities of children in the NSGG, such as developing lifestyles in harmony with the environment (eco-design), climate-smart schools, health centres, sustainable urbanization as well as awareness raising. Climate risk monitoring data integration to national climate systems could be improved, and also action areas for potential positive impacts and outcomes on children. Although Viet Nam's National Adaptation Plan (NAP) does not mention "children" explicitly, it does provide the framework for future activities that could mainstream the interests of children. Meanwhile, Viet Nam's NDCs have a dedicated paragraph on children, enabling potential actions in the sectors and specific interventions in relation to disaster risk reduction (DRR), the Mekong Delta region, community-based models, awareness raising and sectoral investment plans. UNICEF Viet Nam could extend its past and ongoing climate change and child-centred programme efforts to support the GoV in some sectors of NAP implementation. The Ministry of National Resources and Environment (MONRE) could be more involved in the National Programme of Action for Children to better integrate children's interests and roles in climate change. Some initiatives by the MPI and UNICEF to facilitate collaboration between MONRE and the Ministry of Labour, Invalids and Social Affairs (MOLISA) could be considered.

There are several opportunities that largely centre on collaborative action with other stakeholders to create synergies for progressive action to advance the rights and well-being of children in the context of climate change. A series of opportunities based on interviews and document reviews outline where the MPI and UNICEF could work with other stakeholders. For example, key tasks for NDC partnership that would benefit from UNICEF's involvement include a social assessment of the NDCs, to be conducted by the MONRE and UNDP in the future. For NSGG, UNICEF should



continue its partnership with the MPI for the integration of child-sensitive issues into national and provincial green growth strategies. For the Viet Nam National Committee for Children (VNCC), comprised of the ministers of MOLISA, the Ministry of Education and Training (MOET) and Ministry of Health (MOH) as vice chairs, there is an opportunity to include the Ministry of Agricultural and Rural Development (MARD) and MONRE in this committee to better mainstream children into government policies related to climate change.

There are also opportunities in each sector and integrated multiple sectors to work together: education, health, WASH and child protection as there are in natural resource management and conservation.

The integration of climate change into the

Environmental Education Plan is an opportunity to flag specific climate change adaptation (CCA) issues within school curricula. In the health sector, there are identified opportunities to assist Viet Nam Health and Environmental Management Agency (VIHEMA) to implement the Action Plan on Climate Change at provincial level, an area where UNICEF could use its sub-national level network to support this plan. In WASH, UNICEF could also advocate MOH/MARD undertake climate risk analysis in WASH services and mapping vulnerable areas as well as developing early warning systems on water demand and water quality as well as the use of the MARD's Climate Resilient WASH Framework in the National Targeted Programme (NTP) on New Rural Development. In child protection, opportunities exist for UNICEF and partners to have inputs into the National Programme on Child Protection 2021-2025 (to 2030), being renewed by MOLISA, with a renewed commitment to mainstream climate change risks into the National Strategy on Social Protection (2021-2030). To tackle environmental degradation and impacts on children, there is scope to work more closely with civil society in Viet Nam, already active in air pollution issues. There are also opportunities for knowledge sharing and collaboration with organizations that work exclusively on the environment (such as Conservation International, WWF) to have input into water pollution and biodiversity loss issues. Similarly, UNICEF could engage civil society on child participation and advocacy based on the former's children's rights experience. Finally, opportunities at sub-national level, from working on resilient cities to numerous climate change-related vulnerabilities in the Mekong Delta region, are apparent where UNICEF already has established networks.

The findings of this study reveal there is clearly a potential enabling environment in terms of a suitable legislative framework in place that – with some analysis, evidence and advocacy – could generate the will and necessary resources to recognize and promote child

rights in the context of their vulnerability to climate change impacts. There is work to be done and opportunities to seize for Viet Nam to demonstrate viable and workable achievements on children's issues.

The report concludes that there is a need to establish multi-sectoral partnerships for action: Partnerships between GoV organizations, social organizations, UN organizations and the private sector are key to moving forward on child-centred climate change action in Viet Nam. There are indeed already some achievements on the climate change front, from policy dialogues and advocacy to research across different sectors involving multi-stakeholders. There are several opportunities for the GoV and organizations, such as UNICEF, to take action and begin collaborative efforts to improve policy as a basis for action. This Climate Landscape Analysis for Children has painted a broad picture of the climate landscape in Viet Nam and what opportunities exist for this landscape to become an enabling environment for the integration of child-centred climate change issues and for Viet Nam to become a frontrunner in recognizing the needs of younger generations to ensure a sustainable future. Broad recommendations include the importance of: i) multi-sectoral, multi-organization collaboration ii) generation and discovery of evidence to support policy advocacy, ensuring sex-disaggregated impacts; iii) monitoring, getting UNICEF's message across powerfully and effectively; iv) more capacity development, especially with GoV at all levels on the importance of integrating children in climate change policy and strategies as well as assessing the impacts of climate change and water insecurity on children; and v) the importance of child participation – so they become effective advocates for the issues that affect them.

1. INTRODUCTION



Viet Nam is widely recognized as one of the most vulnerable countries to climate change in the world¹, with some regions experiencing impacts more intensely than others, particularly the Mekong Delta, mountainous and drought-prone regions as well as urban landscapes. Environmental degradation, including air and water pollution and biodiversity loss, is also highly significant in Viet Nam.

Children are more susceptible to the impacts of climate change and environmental degradation:

- They are more vulnerable to heat waves, especially infants.
- Impacted more by extreme weather events, such as severe storms or floods that not only directly threaten the lives and safety of children, they put them at risk of mental health problems; that can affect access to clean water and quality foods – which in turn impacts children’s health and ability to learn. Storms can also cause lasting effects when they destroy their communities and their schools.
- Poor air quality can cause breathing problems, lung infections and other diseases.
- And Climate change and environmental degradation has led to increases in infections such as Lyme disease, diarrhea, and parasites, which are often more dangerous to children than adults. Developmental delays, disabilities and diseases caused by toxins.

The UN Convention on the Rights of the Child (CRC), the world’s most ratified human rights treaty, shows the power of children to encourage people to take action for the common good². The CRC asserts that children have a ‘right to be heard’ in decision-making that affects their lives (Articles 12 and 13).

A study by UNICEF³ was conducted to scope the

extent to which children’s rights to a “safe and clean environment”⁴ is supported by national laws of certain countries, since the adoption of the CRC in 1989. Although the CRC was ratified by Viet Nam in 1990, climate policies have yet to fully reflect children’s concerns⁵ and issues that affect them. There are policies that recognize children, such as the revised version of the Law on Environmental Protection (Clause No.2, article 04) which states that environmental protection “ensures the protection of child rights...”. Similarly, the Law on Children (2016) also recognizes the importance of protecting children from natural and climate hazards. Of note is the recognition in Viet Nam’s NDCs of children’s vulnerability to climate change. Despite this, there are notable gaps in child-specific references across the national legal framework.

Several global policy agendas are working towards increasing well-being and resilience, while reducing the impacts of climate change. Viet Nam is a signatory to several, including the Paris Agreement under the UNFCCC and Agenda 2030 SDG, which play key roles in people’s well-being and the environment. The SDGs, which many countries including Viet Nam are striving to achieve, are linked to the CRC in terms of child protection, health and education. Achieving these goals would go a long way towards realizing the rights of every child. Similarly, as an early committer to UNFCCC, Viet Nam’s NDCs aim to reduce the steeply growing emission trajectory in 2016. Despite these aims, however, Viet Nam remains on-track to become a major GHG emitter by 2030.

UNICEF’s East Asia and Pacific Regional Office (EAPRO) conducted a review of policy related to children’s rights in the region, which included policy specific to Viet Nam in 2019. The analysis found that the majority of reviewed countries had laws in place that covered most categories of rights and protections of children to a healthy

environment. It also found that few nations had enacted national-level obligations that mandated an assessment of the impact on children's rights. The study concluded that a lack of technical capacity, as well as resources (human and financial), resulted in legislation on rights being lost at implementation level. The other conclusion was a lack of public awareness of the connection between children's rights and the environment at societal and government levels. The paper distilled findings from its study on 17 policies/action plans related to climate change in Viet Nam (refer to Appendix 1). For each policy or action plan, there are corresponding categories to assess the responsiveness of the legal framework to children's right to a healthy environment. Of particular note, in this analysis, is the relatively few legal instruments that recognize children's rights to express themselves and participate. For example, the category "Children's rights to express views and have them considered" is only found in the Law on Children and the category "Participatory rights of children on environmental matters" is found in the Constitution, Law on Biodiversity and National Plan of Action for Children. Only three policy instruments explicitly recognize children's rights to life, health and development: the Law on Children, SEDP 2016-2020 and Law on Natural Disaster Prevention and Control.

1.1. Purpose and intended audience

Recognizing the importance of addressing climate change challenges for children and youth in Viet Nam and the limited evidence, the *Climate Landscape Analysis for Children* (CLAC) in Viet Nam was commissioned by Viet Nam's MPI and UNICEF Viet Nam. Its purpose is to conduct a comprehensive analysis of the landscape of children and climate change in Viet Nam. The need was identified in dialogue between MPI and UNICEF as a result of a mid-term review of the GoV-UNICEF country programme document (CPD) 2017-2021 in preparation for the CPD 2022-2026. The MPI, in partnership with UNICEF Viet Nam, wishes to understand the baseline of climate-related issues affecting children to

inform the development of the SEDP 2021-2025 and other climate change-related policies to bring forward a more child-centred approach. The CLAC is intended to help identify areas for further research to promote child-centred approaches to climate change policy and action in Viet Nam.

The intended audience for the CLAC includes: i) MPI and key GoV stakeholders involved in socio-economic and climate change policy and leading in water, sanitation, education and health, ii) UNICEF and other development agencies with a climate change and environment mandate and iii) the private sector and CSO partners.

1.2. Structure of the report

Section 1 of the report is an introduction that outlines the purpose and methods of the CLAC. **Section 2** provides an overview of key climate change hazards, impacts and environmental risks to children Viet Nam, with data that underlines recent climate trends as well as future projections, based on the highest emissions scenario model (RCP8.5). Impacts on children are summarized in key sectors (food security, WASH, health, education and child protection).

Section 3 identifies ongoing and future GoV/ partner processes, plans and strategies that could be targeted for engagement. Based on gaps in the plans and strategies, a broad overview of some opportunities is provided, where the MPI, UNICEF and other stakeholders could advocate for child-sensitive climate actions.

Section 4 provides more detail, largely using a table format, on specific opportunities that could be taken by MPI, development partners including UNICEF, private sector, CSOs and other stakeholders based on data collected during the analysis as well as opportunities related to actions that require collaboration for climate change action.



Section 5 contains the conclusions and recommendations.

Appendices provide additional reference material.

1.3. Methodology for the CLAC

The landscape analysis was conducted by two consultants, international and national, led by the MPI and supported by UNICEF. The analysis is based on: i) a comprehensive desk review of relevant documents and ii) interviews with key stakeholders at national level and with selected stakeholders at sub-national level. Much of the field work and report writing took place with extensive use of online methodology as this research took place during March to December 2020, amid the global COVID-19 pandemic. The scope of the CLAC includes children

generally throughout Viet Nam, but gives special consideration to the most vulnerable – children living in remote communities, those living with disabilities or with high poverty levels. The analysis also considers specific regions at sub-national level, which include Ninh Thuan province, Da Nang city and the Mekong region, largely due to their high vulnerability to climate change impacts. Stakeholders interviewed include UNICEF staff, government agencies, other UN agencies, local and international NGOs and the private sector. A list of interviewees is provided in Appendix 2. The desk review was conducted in March and the consultations, based in Ha Noi, were undertaken from 9-14 March 2020. The study was conducted in close consultation with the MPI, UNICEF Viet Nam and key stakeholders and presentations of preliminary results were made to MPI and UNICEF. The CLAC work plan is provided in Appendix 5, adjusted to developments from the COVID-19 pandemic.

2. OVERVIEW OF KEY CLIMATE CHANGE HAZARDS, IMPACTS AND ENVIRONMENTAL RISKS TO THE WELL-BEING OF CHILDREN



This section describes key climate change hazards and biophysical impacts which, in turn, impact key sectors affecting children in Viet Nam – food and nutrition security, health, WASH, education, child protection as well as cross-cutting gender, social inclusion and humanitarian issues, where information is available.

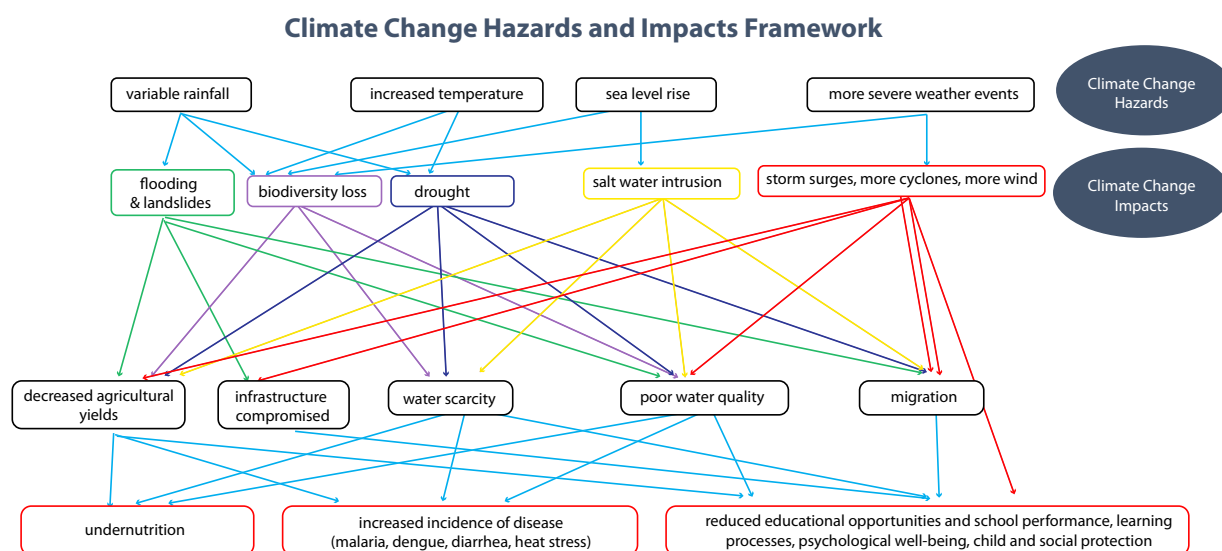
Figure 1 is a conceptual mapping of the relationship between climate change hazards, and the biophysical and socio-economic impacts of climate change on children. A joint study by UNICEF and MOLISA, Impacts of Climate Change and Natural Disasters on Children in Viet Nam (2016), provides a comprehensive matrix of climate change impacts on children for Viet Nam as a whole and some provinces. For additional data on climate risks, UNDP in collaboration with

MARD and MONRE¹ developed an up-to-date climate risk data base for Viet Nam². A useful and comprehensive diagram representing climate change impacts can be found in UNICEF's 2012 Climate Change Adaptation and Disaster Risk Reduction in the Education Sector Resource Manual (see page 26 in the manual). Figure 1 illustrates linkages between climate change hazards, and three tiers of impacts in Viet Nam.

1 As well as other ministries responding to challenges posed by climate change and disasters.

2 Available at: <http://eng.climaterisk.org.vn/>

Figure 1 Linkages between climate change impacts on children



(flooding and landslides, biodiversity loss, drought, saltwater intrusion, storm surges, typhoons) which then have tertiary impacts (decreased yields, compromised infrastructure, water scarcity, poor water quality, migration), which then impact children in different ways. There is growing evidence that climate change is compounding the vulnerability of children, women and other marginalized groups, such as ethnic minorities, those living in remote communities and people with disabilities. Existing vulnerabilities include poverty, food and nutrition insecurity, and lack of access to safe and abundant water supply and other natural resources. There is also evidence to suggest that child protection issues are more pronounced with climate change, including in humanitarian situations after disasters, and that girls and women face greater challenges in terms of livelihoods and labour loads. However, the literature on children and climate change is largely “gender blind” and does not examine the issues of gender equality deeply⁶.

Environmental degradation, including air pollution which is a significant problem in parts of Viet Nam, is not a direct climate change impact as such, but instead a direct contributing factor to climate change³. Air pollution is directly linked to pneumonia and other respiratory diseases that accounted for almost one-in-10 under-five deaths in Viet Nam in 2016. This makes air pollution one of the leading causes of children’s illnesses⁷. Other consequences of environmental degradation discussed include water pollution and biodiversity loss.

2.1. Variable rainfall: contributing to flooding and drought

Annual rainfall shows decreasing trends in northern regions and increasing trends in southern regions over a 57-year period (1958-2014). Drought in the dry season has occurred more frequently and extreme rainfall events showed an upward trend during 1961-2010 in Viet Nam⁴. Future projections for heavy rainfall show mean annual precipitation will rise by 57mm in 2050 (RCP⁵ 8.5, High Emission scenario)⁶. Total rainfall from the beginning of the Summer-Autumn crop is significantly below the average of many years, water storage in various irrigation and hydropower reservoirs is only 20-60 per cent of design capacity, much lower than the annual average in many years and various small reservoirs have run out of water⁸. Wet season rainfall is projected to rise by 10-20 per cent by 2050 and by 10-30 per cent by 2100⁹.

The World Bank data portal (CCKP) shows that Viet Nam has extremely high exposure to flooding, ranking first along with Bangladesh in 2016¹⁰. Flooding represents the largest risk by economic impact in Viet Nam, accounting for an estimated 97 per cent of average annual losses from hazards. In the last quarter of 2020, the central coast region faced unprecedented multiple storms causing serious flooding. This affected an estimated 7.7 million people, with 1.5 million people in nine provinces directly affected and approximately 380,000 houses flooded, damaged or destroyed. Of those directly affected by this disaster, some 753,000 were women and girls, 134,000 were children under-five, and 143,000 were over 65 years old¹¹. Research conducted more recently estimates that exposure to flooding will increase from 33 per cent of the population exposed to a flood

3 Many of the same pollutants that affect health, such as black carbon and ozone (O₃), also contribute to atmospheric warming. Therefore, any interventions that reduce emissions will likely result in benefits for children’s health and the climate (WHO 2018).

4 Although the World Bank data portal reports that heavy rainfall events have not changed significantly since 1960.

5 A Representative Concentration Pathway (RCP) is a GHG concentration (not emissions) trajectory adopted by the IPCC. Four pathways were used for climate modeling and research for the IPCC fifth Assessment Report (AR5) in 2014.

6 No end-of-century changes across the four emissions pathways are statistically significant as estimating future heavy rainfall results are uncertain.

currently (a one-in-25 year flood) to 38-46 per cent by 2100. This represents a 13-27 per cent increase above current exposure and depends on the severity of SLRs¹². This rise is projected to impact GDP annually by US\$3.6 billion by 2030.

In 2015-2016, Viet Nam had its worst drought in 90 years, affecting more than two million people (including 520,000 children) in 52 of 63 provinces, with a state of emergency declared in 18 provinces¹³. During the peak of the drought (February-May 2016), an estimated two million people did not have access to safe water for consumption or domestic use, 1.1 million were food insecure and more than two million people faced damaged or lost livelihoods. For drought-affected provinces, the total recovery needs from October 2016 to 2020 were equivalent to US\$1.2 billion. Projections of drought into the 21st century, based on the RCP 8.5 pathway, suggest they may occur more often and longer in most climate zones of Viet Nam¹⁴. In the Mekong region, (under the RCP 8.5 scenario), dry season rainfall is projected to decrease by 10-20 per cent by 2050 and 20-40 per cent by 2100¹⁵.

Impacts are felt regionally in Viet Nam. The Mekong region is considered one of the most at-risk 'global hotspots' of climate-related vulnerability¹⁶ due to the high population and importance of the region for food production and the number of upstream countries depending on it. An estimated 1-1.3 million people are drought-affected in nine Mekong provinces, representing 13-17 per cent of the delta's total population. Ninh Thuan province is also severely affected by drought, with an emergency declared in 2015. In 2016, drought in the Central Highlands area caused 60 per cent crop production losses per farmer¹⁷. The province also suffered from increased saltwater intrusion. In the city of Da Nang, extreme weather events such as typhoons, floods and droughts over the past few years have caused significant losses in terms of housing, employment, and infrastructure and put pressure on water supply, food hygiene and livelihoods. These challenges are predicted to intensify, driven by development, climate change, and population growth.

2.2. Increased temperatures

Rising temperatures also contribute to ocean acidification and warming that adversely affects marine life, including the health, reproduction and migration of marine species – compounded by other stresses such as overfishing and pollution¹⁸. High temperatures can indirectly contribute to saltwater intrusion in coastal areas, when fresh groundwater is reduced in the aquifer (during drought for example) and the more dense salt water intrudes into aquifers, forming a saline wedge below the freshwater. This interface of mixed salinity can shift inland during dry periods, when freshwater supply decreases, something which happens regularly in the Mekong region.

The total annual number of hot days (temperature above 35°C) is projected to surge by 27 days by 2050 (compared to 1980-1999), leading to what might be considered chronic heat stress in some areas, even under lower emissions pathways. By the end of the 21st century, these increases are estimated to result in 60-70 days in some regions. Ha Noi and Ho Chi Minh City (HCMC) are among the urban areas globally most threatened by deadly heat¹⁹. The number of heat waves (three consecutive hot days) is expected to jump in most regions by the end of the 21st century, especially in the southern region and south of the Central Highlands, with an annual increase of six to 10 heat waves²⁰.

The annual average temperature in Viet Nam climbed by approximately 0.5°C to 0.6°C during the last 50 years (1958-2007) and is projected to increase by 3.36°C by 2080-2100. The number of annual heat waves (three consecutive hot days) is expected to rise in most regions of Viet Nam by the end of the 21st century, especially in the southern region and south of the Central Highlands, with an increase of six to 10 heat waves.

The average water level over coastal areas in Viet Nam increased by 3.5±0.7 mm/year (based on 17 sea water level gauging stations along the coast and islands of Viet Nam). If sea levels rise by one-metre, one-third of the Mekong Delta will be submerged in deep water²¹. A combination of high temperature and SLRs can induce saltwater intrusion in coastal areas. By the end of this century, higher sea levels in the Mekong Delta, where nearly half of Viet Nam's rice is grown, may inundate about half (~1.4 million hectares) of the delta's agricultural lands.

2.3. Sea level rises and saltwater intrusion

Sea level rises (SLRs) are caused by oceanic thermal expansion, ice melt from glaciers and small ice sheets, melt and ice loss from Greenland and Antarctica, and changes in terrestrial water storage. SLRs are accelerating in response to climate change and will result in salinization, flooding and erosion through storm surges that affect human and ecological systems including health, heritage, freshwater, biodiversity, agriculture and fisheries. Increased heat in the upper layers of the ocean is also driving more intense storms and greater rates of inundation which, together with SLRs, are already causing significant impacts to sensitive coastal and low-lying areas²².

In some coastal areas, saltwater intrusion has extended up to 90km inland, causing river water to be too salty for human or animal consumption, crop irrigation and fish-farming²³. The results indicate that the percentage of rural people affected by saltwater intrusion in 2012 was 39.5 per cent, which will rise to 41.4, 45.3 and 47.6 per cent in 2020, 2030 and 2050, respectively²⁴. Since January 2016, more than two million people in 18 provinces in southern Viet Nam have been affected by drought and saltwater intrusion associated with the El Niño–Southern Oscillation, considered to be compounded by climate change²⁵.

In the Mekong Delta, the decrease in groundwater levels due to drought have resulted in the most extensive saltwater intrusion in 90 years. While saltwater intrusion (which contaminates aquifers that support domestic water demand) is an annual phenomenon in the dry season from December to April, it began almost two months earlier than normal in 2016. Salt water penetrated an average 20-30km further inland than other years. As a result, 400,000ha of cropland were affected by decreased productivity loss, and 25,900ha were not been planted at all²⁶. By the end of this century higher sea levels in the Mekong Delta, where nearly half of Viet Nam's rice is grown, may inundate about half (~1.4 million hectares) of the delta's agricultural lands²⁷. A one-metre SLR

would inundate a quarter of HCMC, Viet Nam's largest city and home to more than six million people. Changes in the patterns and magnitude of the Mekong's floods as well as changes in salinity due to rising seas threaten the rice, fish and fruit industries. In addition, a one-metre SLR would inundate nine key biodiversity areas in the Mekong Delta²⁸. In Da Nang, drought and saline intrusion in rivers are increasingly affecting water supply, which in turn increases the pressure on socio-economic sectors such as tourism development, environmental sanitation, and public health²⁹. In August 2018, the salinity intrusion into the Cau Do river resulted in a serious shortage of water supply for many areas in the city³⁰.

Da Nang is a city vulnerable to climate change impacts. According to Viet Nam's climate change scenario³¹, updated in 2012, SLRs near the city would leave 2.4 square kilometres vulnerable to flooding by 2030.

Graphic representations of some of these climate change trends are shown in Appendix 4.

2.4. Extreme weather events and climate change-related disasters

Climate change-related disasters in Viet Nam include typhoons, landslides and prolonged periods of drought and flooding. Viet Nam has a high exposure to tropical typhoons, with landfall likely along its northern coast, central and Mekong regions. Climate change is expected to interact with typhoon hazards in complex ways currently not well understood. Known risks include SLRs to enhance damage caused by typhoon-induced storm surges, and the possibility of increased wind speed and precipitation intensity³². El Nino and La Nina showed stronger impacts likely due to climate change. In Viet Nam, during 1961-2010, there was no evident variability in the frequency of tropical cyclones including typhoons and tropical depressions making landfall. However, typhoons of medium strength tended to decrease and those with very high intensity

increased. The typhoon season at present tends to end later and more landfalls occurred in southern regions in recent years³³. When coupled with RSLs, typhoons are predicted to have significant economic impacts. Together these forces lead to significant damage to agriculture as well as infrastructure, such as roads and buildings³⁴. Due to population growth in exposed areas and spiralling infrastructure assets, the damage potential from typhoons is increasing^{35 36}.

In Da Nang, during 1998-2015, there were 26 typhoons, 13 tropical depressions and 46 floods directly affecting the city that resulted in 219 deaths/missing persons, 226 injured, loss of 156 ships, and destruction of 138,134 houses. Infrastructure and agriculture losses over these events totaled VND 9,401.6 billion (US\$ 423 million)³⁷.

2.5. Climate change impacts on children: key sectors

The climate change-related hazards presented in the previous section – which include variable rainfall leading to drought and flooding events, increased temperatures, SLRs and saltwater intrusion, as well as extreme weather events and disasters – all have significant impacts on children. These impacts are either direct or indirect and affect food and nutrition security, health, water and sanitation, as well as education and migration. The threat of climate change-induced higher disease rates, food insecurity and water scarcity altogether to some extent, may undo the gains made in children's well-being over the past 30 years in Viet Nam. According to the WHO, more than 88 per cent of diseases attributable to climate change occurred in children younger than five years of age. In particular diarrhoeal diseases, the second leading cause of death among children under-five, are responsible for 361,000 children deaths globally every year due to poor access to WASH. The quality and availability of clean water, food security, and overall health are also affected by environmental degradation – including air and

water pollution and loss of biodiversity – and this is in addition to climate change impacts. The impacts on children in these key sectors are presented below.

2.5.1 Food and nutrition security (SDG Indicator 2.1.2)

The IPCC fifth Assessment Report (AR5) stated with high confidence there will be a “substantial negative impact” on child nutrition.

Children are particularly vulnerable to food insecurity, as periods of undernutrition can contribute to delayed development, lower school attendance due to lower household income and increased vulnerability to non-communicable diseases later in life. Food insecurity also threatens maternal health, which is closely related to a child’s probability of surviving and thriving in the early years³⁸. Despite the promising lower levels of undernourishment for Asia from 17.4 per cent in 2005 to 11.3 per cent in 2018³⁹, the increasing severity of climate change impacts on the agricultural and fisheries sectors could change these positive trends. In general, Viet Nam has ensured food security despite recent challenges posed by climate change by maintaining and increasing rice and aquaculture production. However, the rate of stunting remains very high among ethnic minority children under-five (32 per cent compared to the national rate of 17.1 per cent)⁴⁰. Climate change impacts on food security occur in some areas with the most vulnerable groups, including ethnic minorities and those living in poverty, such as the central coast region and Central Highlands.

A study by Oanh Le Thi Kim and Truong Le Minh (2017)⁴¹ found that climate change contributed to increased migration of farmers, which can have implications for food security for children, as access to food may decrease with the move away from family farms.

The agricultural sector is heavily impacted by variable rainfall (leading to drought and floods), increasing temperatures, SLRs, saltwater intrusion and severe weather events. These impacts can have severe repercussions, ranging from complete crop failure to chronically reduced yields and lower income for families, all of which directly impact food and nutrition security. Recent studies show that, in the next 50 years, about half of the area under cultivation in the Mekong Delta will be affected by SLRs and saltwater intrusion, with millions of residents suffering from losses of housing or livelihoods. The total number of people expected to be affected by drought and saltwater intrusion in the Mekong Delta in 2020 is 685,558, including 141,781 children⁴². Higher ocean temperatures coupled with acidification, can put marine ecosystems and associated biodiversity at risk – thus directly impacting the livelihoods of coastal communities dependent on subsistence fishing^{43 44}. Reductions in fishing yields have direct food security implications for children and their families, in terms of food availability and income from selling fish.

2.5.2 Health

Drought, water scarcity and flooding are shown to lead to increases in water-borne, vector-borne and food-borne diseases such as diarrhoea, dengue and malaria. Floods lead to severe losses of property and life. Women and children are the most vulnerable as they have fewer opportunities than men to learn how to swim⁴⁵. Children in urban areas in less developed countries in general are particularly at risk from water-borne diseases, made acute by excessive rains and localized flooding⁴⁶. Incidences of dengue fever are likely to increase in Viet Nam and intensify. Flooding was found to be the major climate-related disaster affecting children's health in Viet Nam⁴⁷. An increase in pediatric hospital admissions in the Mekong Delta region is significantly associated with seasonal river flooding and, with flooding made more severe by increased rainfall, these admissions are expected to swell⁴⁸.

Higher ambient temperatures as well as extreme weather events and disasters are shown to increase cases of certain diseases in children. For example, a 1°C rise in average temperature is associated with a 0.4 per cent increased risk of diarrhoea, (2.5 per cent, shigellosis), (0.9 per cent, mumps), (1.1 per cent, influenza), (5 per cent, dengue), (0.4 per cent, malaria) and (2 per cent rabies)⁴⁹. Current literature suggests children, pregnant women and unborn children are highly vulnerable to heat exposure. For example, increased heat exposure due to climate change is expected to multiply preterm births, decrease birth weights and increase stillbirth rates⁵⁰.

The mental health of children is also impacted by climate change, as discussed in Section 2.5.6.

2.5.3. Water, sanitation and hygiene

The Water, Sanitation and Hygiene (WASH) sector is also affected in numerous ways by climate change, including negative impacts on drinking water availability, quality and delivery of sanitation and hygiene services as well as impacts on investments, infrastructure and communities⁵¹. Viet Nam surpassed Millennium Development Goal targets in water and sanitation when 82 and 68 per cent of the population, respectively had access improved water and sanitation. Currently, 98 per cent of Viet Nam's more than 97 million residents have access to improved drinking water sources and 78 per cent uses improved latrines. Despite this, piped water only reaches 10 per cent of rural households and 61 per cent of urban households⁵². The quantity and quality of drinking water is impacted by rainfall variability, intensity and demand and groundwater has a longer residence time. Climate change impacts can be particularly severe for rural populations still served by self-supply water (41 per cent of Viet Nam's rural population)⁵³, with water scarcity due to unreliable water supply and limited household storage capacity to bridge periods where supply is interrupted. The quality of self-supplied water is often poor due to limited understanding of water quality importance amongst users and limited treatment options at household level. Self-supply is also negatively impacted by extreme climate events such as flooding, as well as contamination due to agriculture fertilizers and unsafe sanitation. Floods and storms affect degraded piped water schemes and individual dug wells can lead to water contamination and increased delivery costs. Unsafe water and poor sanitation contribute to disease risks, such as diarrhoea, the

The VIHEMA (MOH) Climate Change Response Action Plan of the Health Sector (2019-2030 with a vision to 2050) bases recommendations on research that found that higher temperatures contribute to an increased risk of dengue, diarrhoea, HFMD and hospitalization rates especially, among children and the elderly. A 1°C increase in temperature will result in a 3.4-4.5 per cent rise in hospitalization rates for children.

second largest cause of death of children under-five worldwide⁵⁴. As climate change intensifies, increased scarcity of safe drinking water and sanitation has the potential to undermine many gains in child health and survival as well as impacting investments and infrastructure. Access to safe water, sanitation and hygiene is crucial to prevent the spread of infectious diseases, especially during the COVID-19 pandemic. Advances in this sector in Viet Nam have been a major reason for historical progress on preventing child deaths.

In rural Viet Nam, women are typically responsible for ensuring sufficient water for household needs. Limited water supply and sanitation services severely affect poor women's time availability, physical security, productivity, as well as income-generating capacity and access to adult education. Of note, approximately 65 per cent of households in Viet Nam lack a household water source and women and girls are perceived as responsible for collecting clean water, with this burden of water collection falling disproportionately (10 per cent more) on ethnic minority women and girls. In addition, although women are still the major domestic users of water, they are less likely to participate in decision-making on domestic or public water supplies⁵⁵. Climate change will place additional stresses on delivering and sustaining public health and well-being related outcomes⁵⁶. In addition, poor sanitation and water supply impact negatively on girls at school. Lack of appropriate facilities leads to menstruating girls missing school and can expose girls to physical violence. Women's involvement in positions of responsibility in the water and sanitation sector leads to improved management and outcomes.

2.5.4. Education

Loss or damage to school infrastructure often results from extreme flooding, which can cause schools to close and education to be compromised. Drought and associated water scarcity can also impact education if the quality and quantity of water available at schools is affected. A higher incidence of heat-related diseases along with heat stresses can reduce a child's capacity to learn and affect teachers' ability to instruct in the classroom. Higher temperatures, especially in urban areas, can further undermine air quality and increase risks of respiratory diseases such as asthma and other illnesses to which children are particularly susceptible, which may contribute to low attendance at school⁵⁷.

Climate change can also impact education indirectly: when crops are affected and agricultural outputs are reduced, household income is lower and school expenses are difficult to cover. Children may need to help with additional agricultural labour and be unable to attend school⁵⁸. Also, due to the gendered division of labour, girls are often at higher risk of increased workloads related to agricultural tasks, resulting in greater school absenteeism and higher early drop-out rates⁵⁹.

Impacts on the education sector are evident from consolidated data on typhoon and water inundation damage⁶¹:

- Typhoon Xangsane (2006) damaged 5,236 classrooms in central Viet Nam
- Typhoon Damrey (2005) destroyed 3,922 classrooms
- Inundations in 2000 and 2001 damaged 12,909 and 5,315 classrooms, respectively in the Mekong Delta
- Inundations in 1999 destroyed 5,915 classrooms in central Viet Nam⁶²
- Typhoon Linda (1997) hit the southern part of the Mekong Delta and caused casualties and devastation in 21 provinces, with 1,424 collapsed and 5,727 damaged classrooms.

2.5.5. Migration

Climate change-related disasters, including loss of coastline due to SLRs, storm surges and typhoons, can affect whole communities and contribute directly to increased migration. Across the globe, each year, as many as 50 million people are displaced due to climate change-related and natural disasters⁶³. According to the Internal Displacement Monitoring Centre⁶⁴, with more than a million displaced people during 2008-2012, Viet Nam ranked 17th of 82 countries with the most displacement by natural disasters⁶⁵. Specifically, extreme natural hazards have negative impacts on family livelihoods and as a result, parents often have to migrate to earn a living and consequently children do not receive sufficient care and attention from parents. A direct link between climate change and migration was presented: based on 400 interviews in two provinces (the highest

Climate change-related disasters can contribute to increased school drop-outs, general underachievement and failure. In some cases, children - especially girls, may be more likely to leave school and engage in day labour instead, especially after a disaster or in situations of chronic environmental degradation⁶⁰. Repeated absences and a lack of a continuous formal education can directly affect children's well-being and have lifelong impacts through the choices they make as adults.



sources of immigrants to HCMC), statistical analysis showed the impacts of climate change on: i) production activities, ii) quality of life and iii) environmental quality are factors that contributed to migration decisions of those suffering from climate change. There was a correlation between the impacts of climate change and migration decisions ($p < 0.05$), and the decision to migrate was directly proportional to the severity of climate change⁶⁶. This study shows a relationship between climate change and migration and underscores the multifaceted impacts of climate-related migration on children, which includes health impacts, low school attendance, child protection and psychosocial issues.

Livelihoods and social support mechanisms (social protection) are directly affected by displacement due to migration, which can increase children's vulnerability to discrimination, abuse, violence, poverty and exploitation⁶⁷. Migration impacts can include fragmentation of families, interruption to education and disruption of social networks. Health effects, such as the outbreak of communicable diseases, can also result from some migration situations.

2.5.6. Child protection and psychosocial impacts

While there have been few studies on interactions between child protection and climate change impacts, some notable trends have emerged. Plan International and ODI, supported by a World Bank study, found that children in marginalized communities were in insecure situations due to climate change impacts⁷¹. Children are more often compromised during humanitarian situations, for several reasons, key of which are due to migration and displacement, as discussed earlier.

Pressure on livelihoods (loss of income from agriculture or displacement) increases risks of domestic violence, particularly against children. Many children have to drop-out of school to help parents earn money or engage in early marriages as a family economic measure. Child protection can also be threatened when children are exposed to environmental hazards at school, such as structurally unsafe buildings, insufficient safe water and sanitation facilities, and other safety concerns on or near the school compound, such as hazardous waste. These findings, combined with projected climate changes, suggest severe implications for the overall and continued well-being of children.

Studies have also shown that when parents are forced to migrate to find work, there is a greater incidence of child neglect and abuse as well as increased school drop-out rates⁶⁸. In cases of displacement and migration, girls have been found to be at increased risk of violence and exploitation, including sexual and physical abuse during and after extreme weather events. These risks are heightened when collecting food, water and firewood or when staying in temporary shelters or refugee camps. In addition, when a family is faced with economic hardship caused by climate change, studies suggest that the risk of child marriage can increase⁶⁹. Boys often end up working in physically demanding sectors (coal picking, fishing) and do not attend school⁷⁰.

In addition to breaking down the physical protective environment, disasters can raise psychosocial protection issues. These sudden and severe changes in the environment can affect children's access to quality education and increase incidences of violence against children⁷². Displacement or disruption of home or school and normal routines may cause children and youth to suffer from mental health and psychosocial distress. For example, when youth migrate out of their communities for work, many are not registered, they are required to work long hours, are paid very little, and, as a result, may suffer from physical and mental stress and abuse⁷³. As a consequence of extreme climate change situations, many children and teenagers may experience a range of emotions and reactions, such as being disengaged, having difficulties completing certain tasks, being withdrawn, rejection of rules and aggressive behaviours.

2.5.7. Social protection

Cash transfers are a core building block of risk-informed and shock responsive social protection. A well-coordinated and coherent cash transfer mechanism, equipped with effective delivery systems can help to maximize resources and deliver assistance in a timely manner to children and their caregivers in affected areas, thereby enabling them to better respond to shocks.

In 2017, the GoV approved the "Master Plan on Social Assistance Reform and Development in the period 2017-2025 with vision to 2030" (MPSARD) with three components: (i) regular social assistance schemes providing monthly cash transfers to target groups of beneficiaries, (ii) social care providing *ad-hoc* care services for people in need of special protection, such as victims of trafficking or domestic violence and (iii) emergency assistance schemes providing short-term emergency relief immediately after natural disasters, through in-kind aid and cash.

Higher intensity, increasing frequency and severity of natural disasters in Viet Nam means they can no longer be considered irregular and unexpected events. Instead, they are associated with long-term climate change. As such, social



protection systems should be strengthened to not only respond to isolated cases of natural disasters, but also take into account various risks in preparation for long-term socio-economic impacts on families and children. A key challenge for Viet Nam's existing emergency cash assistance is a focus on short-term emergency relief immediately after natural disasters through in-kind aid and cash⁷⁴. It is neither child sensitive nor shock responsive due to weak local capacity to assess damage and identify people's needs. It is based on a highly rigid framework that hinders timely assistance, including for early action. It also has a weak delivery system, inadequate level of support and limited coordination across stakeholders⁷⁵. Furthermore, regular social assistance policies are fragmented and lack an emergency clause to 'flex' existing schemes to covariant risks such as climate change, economic crises and pandemics.

2.6. Environmental degradation and associated impacts on children

There are a large number of issues related to environmental degradation in Viet Nam, as with other countries where economies are based on resource exploitation. This section explores three major symptoms of environmental degradation: air and water pollution and biodiversity loss. The environment is facing several pressures, including high population growth and urbanization, increased GHG-emitting traffic transportation, industrial activities, construction and exploitation of natural resources.

Viet Nam's economy is still heavily dependent on fossil fuels and, as a result, is and will continue to be a major regional GHG emitter, as well as a major contributor to air pollution, unless renewable energy becomes mainstream. A four-fold increase in net emissions is projected between 2010-2030 in Viet Nam⁷⁶. The 2020 Environmental Performance Index (EPI, as developed and monitored by Yale University⁷⁷) ranked Viet Nam 159th out of 180 countries for air quality and 141st overall, with a score of 33.4 (highest score is 82.5 and lowest is 22.6). Air pollution in Ha Noi is extreme, with the proportion of days with Air Quality Index levels (AQI) at 101-200 (unhealthy levels for sensitive groups) ranging from 40-60 per cent of total monitoring days between 2013-2014, according to MONRE. The report also found that the daily mean of NO₂, ozone (O₃), sulfur dioxide (SO₂), and particulate matter concentrations were often above WHO suggested levels⁷⁷.

7 The EPI ranks 180 countries on environmental health and ecosystem vitality. These indicators provide a gauge at a national scale of how close countries are to established environmental policy targets.

Water pollution is often the result of bacteriological contamination from human activities. Sources of pollutants include run-off from agricultural pesticides, industrial emissions and discharges, as well as sewage and waste disposal from water treatment processes.

The key issues around water pollution in Viet Nam include hydrological development (dam construction), over-exploitation of groundwater resources, land-use changes (notably to aquaculture) and rapid, at times unplanned, urban development.

Groundwater extraction in the Mekong Delta causes land subsidence, and upstream dam construction drives changes in Mekong river flows and reduces the distribution of sediments⁷⁸. In addition to such human-caused water issues leading to reduced availability and quality of water, there are climate change-induced changes, as mentioned earlier in this report, that compound these pressures.

Currently, 13.5 per cent of discharged urban wastewater is processed. However, untreated wastewater along with rubbish, is still being discharged into the ocean along the beaches of Da Nang and other parts of Viet Nam which has huge impacts on seawater quality. Leakages and smells from landfills affect the living environments of thousands of families, including women and children, causing morbidity and affecting long-term health⁷⁹. Climate change impacts will only exacerbate pressures on Viet Nam's water resources from human development processes.

Viet Nam is one of the most biodiverse countries in the world. However, a fast-growing economy is usually at the expense of exploitation of natural resources. Biodiversity loss continues unabated in Viet Nam – largely due to habitat destruction and land conversion from unsustainable business practices and agriculture, mining and aquaculture, pollution, over exploitation of forests and fisheries and the illegal capture and trafficking of endangered species. In addition, the impacts of biodiversity loss and associated losses of ecosystem services are made worse by climate change⁸⁰.

Plastic pollution

According to some research, Viet Nam ranks fourth in the world in volume of plastic waste, with approximately 730,000 tonnes of plastic waste ending up in the sea annually⁸¹. The authors also noted that the technology for plastic recycling used in Viet Nam's major cities was outdated, in-efficient and expensive. The overall impact, if nothing is done, is plastic will take up more space in the ocean than fish by 2050⁸². This of course, has a cascading effect on children, who depend on ocean fisheries for food security and who will also lose their connection to a clean and natural environment.

The value of biodiversity and its contribution to the well-being of children, the broader population and for Viet Nam's development as a whole is not recognized in the national psyche nor in economic planning. Efforts to manage Viet Nam's biodiverse resources are currently insufficient and the system of State management agencies responsible for biodiversity remains fragmented and weak. Laws and regulations to protect biodiversity are "unsystematic and lacking in policy

conformity; community involvement is yet to be adequately mobilized; planning for national, regional and provincial biodiversity conservation has not been implemented in a systematic manner; and investment in biodiversity conservation and development remains highly limited⁸³.

Whole ecosystems, land and marine, in Viet Nam are at risk: for example, research from the Nha Trang Institute of Oceanography indicates that between 1994-2007 live coral reefs decreased by up to 30 per cent. Natural mangrove forests have almost completely disappeared and 56 per cent of mangrove areas in Viet Nam are plantations, which have a very low diversity of species. Resolution 120 states the need for “close control of current natural forests, and to not convert them into other purposes, except for security and defense purposes and special socio-economic development projects decided by the competent authority”. Instead, there should be a strong statement made to protect all remaining natural mangrove forests. Natural wildlife habitats have continued to decline mostly due to changes in land-use. The Viet Nam Red List (2007) identified 882 species (418 animals and 464 plants) as threatened and endangered. This represented an increase of 161 species from the first assessment (1992-1996, the first edition of the Viet Nam Red List). Also between the first and second assessments were 10 species that moved from being classified as “endangered” to “extinct in the wild”.

Forthcoming policy choices on infrastructure, energy, urbanization, production and consumption patterns will determine if efforts towards Viet Nam’s transition to a green, low-emission, low-polluting and climate-resilient development will be realized. If these policy choices still favour exploitation of resources, then the country’s socio-economic progress and sustainable development will ultimately be undermined⁸⁴. While Viet Nam has committed itself to address climate change and ensure environmental sustainability, its socio-economic model contributes to high GHG emissions, natural capital depletion and environmental degradation, while increasing climate and

disaster risks and undermining opportunities for sustainable development⁸⁵.

2.6.1. Air pollution and impacts on children

Health: The WHO has released studies on air pollution impacts on children, who are particularly vulnerable as they have higher breathing rates than adults and, as they grow, their long-term exposure to air pollution may lead to deviations from normal growth patterns. In addition, children may spend more time outdoors engaging in physical activity and thereby inhaling higher doses of air pollutants⁸⁶. They are also smaller and therefore closer to the ground, where some pollutants reach peak concentrations – at a time when their brains and bodies are still developing. In addition, newborns and young children are more susceptible to household air pollution in homes that regularly use polluting fuels and technologies for cooking, heating and lighting⁸⁷. Key findings published by WHO illustrate air pollution’s severe impacts on children⁸⁸:

- Air pollution is one of the leading threats to child health, accounting for almost one-in-10 deaths in children under five years of age
- Air pollution affects neurodevelopment, leading to lower cognitive test outcomes, negatively affecting mental and motor development
- Air pollution damages children’s lung function, even at lower levels of exposure
- Globally, 93 per cent of the world’s children under 15 years of age (630 million <5 years and 1.8 billion <15 years) are exposed to ambient fine particulate matter (PM2.5) levels above WHO air quality guidelines.

AIR POLLUTION – THE SILENT KILLER

Every year, around
7 MILLION DEATHS
are due to exposure
from both outdoor
and household air
pollution.

Air pollution is a major environmental risk to health. By reducing air pollution levels, countries can reduce:



Stroke



Heart disease



Lung cancer, and both chronic and acute respiratory diseases, including asthma

REGIONAL ESTIMATES ACCORDING TO WHO REGIONAL GROUPINGS:



Over 2 million
in South-East Asia Region

Over 2 million
in Western Pacific Region

Nearly 1 million
in Africa Region

About 500 000
deaths in Eastern Mediterranean Region

About 500 000
deaths in European Region

More than 300 000
in the Region of the Americas

CLEAN AIR FOR HEALTH

#AirPollution



WHO IS MOST IMPACTED BY AIR POLLUTION?



Children

Pneumonia is the leading cause of death in children under five years of age. Air pollution is a major risk factor.

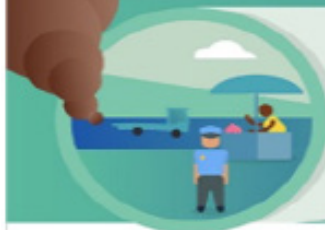
Women

Women working in smoky kitchens are exposed to high levels of household air pollution.



Outdoor workers

People who work outdoors, such as street vendors and traffic officers, are affected by air pollution.



CLEAN AIR FOR HEALTH

#AirPollution



In a study on the relationship between hospital admissions and air pollution in Viet Nam, strong associations were found between hospital admissions for lower respiratory infections and daily levels of air pollution, which the authors stressed, confirmed the need to adopt sustainable clean air policies in Viet Nam to protect children's health. The incidence of respiratory infections, such as bronchitis and pneumonia, is high among Vietnamese children: Pneumonia is the most common reason for paediatric hospital admission in Viet Nam⁸⁹. Globally, air pollution is one of the leading threats to child health, accounting for almost one-in-10 deaths in children under five years of age, and affects neurodevelopment, leading to lower cognitive test outcomes, negatively affecting mental and motor development.

Education: The air pollution health burden on children impacts their education and learning ability. There is evidence that higher air pollution levels are linked to lower academic performance through health effects, such as higher incidences of asthma and respiratory problems. Air pollution affects children's cognitive capacity, their immune system and endocrine functions, as well as contributes to inflammatory diseases, pre-term birth and low birth weight⁹⁰. Children's health, cognitive development, learning comprehension and school performance are all influenced by their school environment. Poor indoor or outdoor air quality can cause respiratory illnesses or make them worse, and can lead to problems with concentration in school, which contributes to learning challenges for students. Poor air quality and other related exposures can lead to sickness and missed school days, and frequent absenteeism leads to increased risks of dropping out of school⁹¹.

2.6.2. Water pollution and impacts on children

Water is the essence of life and "sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses"⁸ is a fundamental right. Governments are responsible for ensuring this human right is fulfilled. Children, in particular, are at risk from water-related illnesses.

Water contamination can result from damaged water pipes, with high microbial content, contamination by other parasites such as helminths or from arsenic or fluoride contamination. Persistent diarrhoea in children can occur from drinking or eating food washed by contaminated water, which can reduce nutrient uptake and affect growth. Water-borne diseases, such as typhoid and dysentery, also jeopardize children's healthy development⁹². Helminths and amoebae may also be transmitted in water and are common in poor-quality water supplies. In fact, a reported 44 per cent of children in Viet Nam are affected by worms⁹³.

8 Quote from: UN Committee on Economic Social and Cultural Rights (CESCR), 'General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)' (E/C.12/2002/11, 2003). <<http://www.refworld.org/docid/4538838d11.html>>

2.6.3. Biodiversity loss and impacts on children

Children are at risk from biodiversity loss. While the impacts are largely indirect, they are systemic and long lasting. Biodiversity conservation implies maintaining contiguous land areas as natural habitats so naturally occurring plant and animal species thrive. These natural ecosystems perform essential functions – “ecosystem services” – which are critical for children’s well-being, including regulating climate, disease levels, providing food and water and supporting soil formation and the pollination of essential crops. Biodiversity also provides important recreational, cultural and spiritual benefits – all of which are important for children’s development. These critical services are often not considered in economic growth and development, with few concessions for conservation. The conservation of entire watersheds, for example, ensures a safe and adequate water supply. Water shed destruction through logging or agricultural intensification for example, results in altered water flows and water pollution, which negatively impact children’s health. Healthy watersheds also support a healthy fishery – 20 million people depend on fisheries for most or part of their income, and exploit and use more than 300 marine species and 50 freshwater aquatic species⁹⁴. Mangrove forests lining coastal regions act as barriers to reduce the impact of storm surges from high waves and help ensure the stability of sea dykes. It has been estimated that mangroves provide significant dyke maintenance and repair cost savings, while also supporting the formation of new areas in the estuaries of the Red and Mekong rivers⁹⁵.

Another example is how healthy intact ecosystems buoy the tourism industry, especially eco-tourism (GoV Resolution 120) and how tourism revenue is important for countries like Viet Nam. As a middle-income country, it is able to better support the necessary infrastructure to ensure adequate child health, education and social support systems. Another example is forest ecosystem conservation which mitigates climate change through carbon sequestration: as soon as forests are cut, carbon is released, thus contributing to GHG emissions. These

forest ecosystems are also sources of essential materials, approximately 25 million people live in or near forests, and derive 20-50 per cent of their income from non-timber forest products, which include hundreds of species of medicinal plants⁹⁶. Finally, natural ecosystems and abundant natural biodiversity are “outdoor classrooms” for children, an opportunity for children to understand their unique natural heritage and be educated in natural history, hydrological cycles and other natural systems. This is in line with the general education curriculum in Viet Nam that underlines the integration of the environment into education activities, including Section 5.4 that requires learners to be “Responsible for the living environment” and to engage in “Natural and social inquiry” and in Section 6.1.3, to “Apply knowledge to practice and natural behaviour in line with the requirements of sustainable development and environment protection requirements”⁹⁷. Lack of opportunities to experience natural ecosystems results in a disconnect from nature, reduced understanding of science and a limited world view especially compared to countries dedicated to conserving half of their natural ecosystems.

In Viet Nam, the real value of biodiversity and its contribution to the well-being of the population, in particular children, and the development of the country have not been properly recognized in national economic planning. Only 0.4 per cent of the total national budget is used for biodiversity conservation and most (90 per cent) of the official development assistance budget for biodiversity conservation is used for infrastructure development instead of conservation⁹⁸.

2.7. Energy issues in Viet Nam and potential impacts on children

The percentage of Viet Nam's population living in poverty, based on the international poverty line, fell from about 50 per cent in 1990 to 3 per cent in 2014. By 2015, almost all urban households had access to electricity, water and sanitation facilities – a significant achievement given that coverage was less than half in 1990⁹⁹. The Viet Nam Energy Development Strategy to 2020 and vision to 2050 covers all forms of energy¹⁰⁰ and an update was drafted in 2017. The strategy mentions the need to take the environment into account and the importance of using renewables, but also does not hesitate to say there is a need to accurately evaluate the reserves of primary energy (coal, petroleum, hydropower and uranium) and to survey, explore and exploit coal, petroleum and other forms of energy in the country.

Low electricity prices coupled with a lack of a long-term energy price road map, and a weak Law on Energy Efficiency and Conservation are not conducive to investments and actions in energy efficiency measures. This leaves the burden and unnecessary demands on electricity generation and investments¹⁰¹. The lack of commitment to and investments in renewables to satisfy a growing economy and population will only continue to impact children through increased GHG emissions, which contribute to climate change, as well as environmental degradation from massive land conversion and associated biodiversity loss, and reduced air and water quality.



Climate change is addressed in numerous socio-economic and sectoral strategies and plans, including those on renewable energy and forestry most significant for GHG emission mitigation. The GoV has made strides in assisting rural poor with the provision of energy to “integrate the use of new and renewable energies into the energy conservation programme and other NTPs such as those on rural electrification, afforestation, hunger eradication and poverty alleviation, clean water and the integrated fish pond-livestock pen-home garden model.” The Viet Nam Energy Development Strategy does not specifically target Viet Nam’s energy policy to identify opportunities for action, but an overview of potential conflicts in policy and action are merely pointed out.

The use of non-renewable energy sources impacts children, for many of the reasons described above. Non-renewables create large areas of land conversion, rely on transportation corridors, and of course, generate GHGs and thus contribute to climate change which, as discussed in this paper, has a myriad of severe impacts on children.



2.8. Impact of dual challenges of climate change and COVID-19 pandemic on children

The harmful effects of the COVID-19 pandemic are compounded by climate change and the impacts on children, especially the most marginalized, are multiple and complex. With so many households already compromised by climate change, the pandemic brings with it possible losses of income so families are even less able to afford basic necessities, such as food and water. Children have reduced access to health care because of the strained health care system handling pandemic cases. Education is compromised due to school closures. While many children have the advantage of online learning opportunities, some three million hardest-to-reach Vietnamese, including ethnic minorities and children with disabilities have limited or no access to these learning platforms and so education for them ceases¹⁰². Online education is extremely challenging in remote areas for ethnic minorities and children with disabilities¹⁰³.

Child protection issues may become even more severe due to additional impacts of the pandemic and children are likely to be more at risk of violence, exploitation and abuse. The UNICEF-ILO joint policy brief¹⁰⁴ also states that the COVID-19 crisis could lead to the first national increase in child labour after 20 years' progress. Child labour could rise as households use every available means to withstand the losses of income and crops as poverty increases. The policy brief also surmised that lockdowns and shelter in place measures come with a heightened risk of children either witnessing or suffering acts of violence and abuse.

Vulnerable children and families in the Mekong Delta region, severely affected by drought and saltwater intrusion intensified by climate change, are suffering from additional challenges due to COVID-19. While a key defence against this

virus is handwashing, more than 35 per cent of commune health stations in Dien Bien, Gia Lai, Kon Tum, and Ninh Thuan provinces also reported insufficient or unsafe drinking water, and 30 per cent of schools across Viet Nam do not have running water. This could make children and other vulnerable people more susceptible to COVID-19.

The challenges presented by COVID-19 have the following implications:

- COVID-19 brings more complexities due to uncertainties in areas prone to climate change in transitioning from response to recovery. This results in the dilemma of managing long-lasting shocks, while preparing for recovery and addressing all pre-existing challenges of poverty and inequality
- GoV budgets could be overstretched responding to a major and prolonged health crisis caused by COVID-19, while tackling climate change and related disasters as well as pre-existing poverty and inequalities. The private sector could experience reduced profits and growth and be less able to contribute sufficiently towards national goals
- There could be gaps in knowledge and capacity to tackle the dual crisis among central and local officials as well as among communities and families, let alone basic knowledge to prepare and manage climatic events and related natural disasters
- Social distancing requirements could limit on-site responses, rapid assessments and monitoring of climate events and natural disasters.

3. CURRENT POLICY, INSTITUTIONS AND FINANCE LANDSCAPE REGARDING CHILDREN AND CLIMATE CHANGE: KEY GAPS AND OPPORTUNITIES



Since signing the UNFCCC in 1994 and the Kyoto Protocol in 2002, Viet Nam has become active on climate change with the formulation of the first National Target Programme on Climate Change in 2008. Since then, two strategies – the National Strategy on Climate Change (NSCC) and National Strategy on Green Growth (NSGG) – were formulated, three laws were issued and many programmes and policy documents were implemented (Box 1 shows key milestones in

climate change policies of Viet Nam).

The National Committee on Climate Change, chaired by the Prime Minister, is the GoV's highest level inter-ministerial agency on climate change. Led by the MONRE and MPI, the committee is represented by key line ministries responsible for the well-being of children, such as the MOET, MOLISA, and MARD.

Box 1. Key milestones in Viet Nam climate change policies

1994: Viet Nam signed and adopted the United Nations Framework Convention on Climate Change

2002: Viet Nam signed and adopted the Kyoto Protocol

2008: 1st National Target Programme on climate change response

2011: National Strategy on Climate Change

2011: 2nd National Target Programme on climate change response for 2012-2015

2012: National Strategy on Green Growth operationalized by the National Action Plan on Green Growth for 2014-2020 (NAPGG, 2014)

2013: Law on Natural Disaster Prevention and Control

2014: Law on Environmental Protection

2015: Law on Meteorology and Hydrology

2016: Viet Nam signed and adopted the Paris Agreement, including the 'Nationally Determined Contributions'

2016: Action Plan on Implementation of the Paris Agreement: Phase 1 (2016-2020) focuses on preparation, Phase 2 (2021-2030) delivers the country's NDCs

2016: National Target Programmes on climate change response and green growth for 2016-2020

2018-present: Updating NDCs and formulating National Adaptation Plan for implementation. Preparation of next round of NSGG 2021-2030, National Action Plan in response to Climate Change 2021-2030, vision to 2050.

Source: Authors

The following section provides an overview of some key on-going and future policy platforms from the perspective of identifying gaps and opportunities to promote a child-centred approach in climate change in Viet Nam.

3.1. National Strategy on Climate Change

The **National Strategy on Climate Change**⁹ was issued in 2011 to provide the overall direction and measures for adaptation and mitigation. It identifies 10 key directions on adaptation and mitigation to respond to climate change in Viet Nam, extensively covering climate change-related disasters, food and water security, SLRs, GHG reductions, resilient communities, science and technology, international cooperation, climate finance and investment.

To implement the NSCC, the GoV issued a **National Action Plan on Climate Change** (NAPCC) for 2012-2020¹⁰ which outlines 65 programmes/projects. Currently, the MONRE is leading the process to evaluate the implementation of the NSCC and NAPCC during 2012-2020 and to draft the NSCC for 2021-2030¹⁰⁵.

Key directions of the NSCC and the relationship to children:

Food and water security: Is one of 10 NSCC focus areas during 2012-2020. Major projects and activities under NSCC address food and water security issues in response to climate change in general, but no specific activities specifically focus on the needs of children. In addition, nutrition is not identified as a key NSCC issue, yet it has significant climate change-driven impacts on children.

During 2021-2030, the MARD¹¹ plans to carry out several activities, such as the target programmes for sustainable development of fisheries, restructuring agriculture, natural disaster relief and prevention and livelihoods, as well as restructuring the development of plantation and livestock in response to climate change. These are potentially the fundamentals for developing projects with more focus on child nutrition and a child-centered approach. In relation to clean water, SEDPs during 2011-2020 target the percentages of the population using clean water in urban and rural areas at 95 and 90 per cent, respectively by 2020. These targets will likely be achieved, however, if piped water is to meet MOH standards, it will take Viet Nam a long time to reach these targets. In addition, indicators and targets related to sanitation and hygiene were not included in the SEDP 2016-2020. In the draft SEDP for 2021-2025, Viet Nam plans to increase the clean water target to 100 per cent for urban areas and 95 per cent for rural areas. It will be critical for Viet Nam to prioritize sanitation and hygiene in this plan, especially in the context of climate change and health emergencies. Plans for water security and water source management under the NSCC for the next period can expand the issues from agricultural production towards community-level ones, including child health and WASH benefits.

Health and community resilience: The NSCC identifies a task on upgrading the health care system for communities to effectively cope with climate change. In future work, the MOH and MOLISA plan several projects on child health and protection. For example, the MOH (General Department of Preventative Medicine) plans to develop a pilot project (2019-2030) on “Forecasts and early warning systems for epidemics and the rate of hospitalization for diseases”, that includes climate change-related diseases and child malnutrition in areas most affected by climate change.

9 Decision No.2139/QĐ-TTg, 05/12/2011.

10 Decision No.1474/QĐ-TTg, 05/10/2012.

11 Decision No. 891/QĐ-BNN-KHCN, 17/3/2020.

Education: Improving people’s awareness, education and training on climate change is identified as one of the tasks in the NSCC. However, the CLAC study found the MOET currently lacks resources to integrate climate change issues into newly developed curricula and to provide training to teachers on these issues. These are identified areas for further support. In addition, support should also be provided for data collection to deliver more evidence-based policy on climate change impacts on children’s learning and the national education system’s role in that learning.

Environment: Mitigation includes “protecting and developing forests sustainably, increasing the absorption of GHG and preserving biodiversity” which reinforces the Technology Needs Assessment (TNA) (see Section 3.8) plan on forests (Land Use, Land-Use Change and Forests, LULUCF), which can be done in rural and urban areas. In this regard, there are many areas where children’s interests could be integrated:

i) design and implement models of green urban and residential areas and continue work on green schools and ii) continue to advocate for green energy and waste management. The MOIT implemented the national target on energy savings and efficient use (2012-2020). This could potentially be expanded in the next period with a greater focus on the green school model as well as energy savings education. There are already several good practices available in Viet Nam in the NGO/CSO community (refer to Section 4), which could be supported to scale-up nationally.

Gaps and opportunities for inclusion of children: The above-listed GoV activities and initiatives only indirectly recognize and potentially benefit children. Children are consistently viewed as a vulnerable group, yet the few policy initiatives that explicitly address children’s issues underline an opportunity for action. For example, some actions are outlined in MOH and MOLISA sectoral action plans on



climate change for 2019-2030. More specifically, the MOH¹² sectoral plan refers to scientific data that provides evidence on climate change impacts on children's health (refer to Section 4). The MOH proposes to undertake future activities on these issues, including increasing awareness, child education, nutrition and health care, and will conduct more studies on child malnutrition in the most vulnerable regions.

While this is a start, the inclusion of child-related issues and activities in Viet Nam's current climate change policies is still limited. A common theme is children are still considered part of a larger vulnerable group, rather than specifically targeting them in recognition they are significantly impacted and are important agents of change. Thus, there are several opportunities for support by various stakeholders to ensure the integration of children into climate change policy and action in the current drafting process of the next NSCC. Opportunities for action are further elaborated in Section 4.

3.2. National Strategy on Green Growth

The National Strategy on Green Growth (NSGG) is one of the activities identified in the NSCC (Activity No. 25). The NSGG (2011-2020) with a vision to 2050 was issued in September 2012 largely with the climate change mitigation goal of reducing GHG emissions, managing natural resources and addressing environmental degradation. The NSGG is operationalized by the National Action Plan on Green Growth (NAPGG).¹³

Key directions of the NSGG and the relationship to children:

The NSGG sets up directions and policy measures toward green production and consumption in Viet Nam over a 10-year period. The NSGG 2011-2020 identifies 66 actions under four themes: i) enhanced institutions and development of action plans on green growth at local level, ii) reduced GHG emission intensity and promotion of clean and renewable energy sources, iii) greening production and iv) greening lifestyles and the promotion of sustainable consumption. Currently, Viet Nam is drafting the NSGG for 2021-2030, with a vision to 2050, with the MPI leading the process with participation of all related ministries and local authorities. In the implementation of the NSGG 2011-2020, there were a few activities on awareness raising related to children. For example, an activity led by the MOET saw integration of energy savings knowledge into education and training programmes for children.

Gaps and opportunities for inclusion of children:

Children were not specifically mentioned in the NSGG 2011-2020. More should be done in the next period of the strategy. Specific tasks and activities may change, but the focus area is still on promoting green production, green lifestyles and consumption. In line with current discussions on the draft 2021-2030 SEDS, new green models and environment-friendly technologies should be strongly promoted in the NSGG and SEDS, such as the circular economy and renewable energy. The active roles of the private sector in green production and of people in green consumption and lifestyles, including climate-smart schools, could be further promoted.

In this regard, there are many potential areas for integrating the interests and vulnerabilities of children in the NSGG, at the very least, in the aspects of education and awareness raising, such as developing a new rural model with lifestyles in harmony with the environment (eco-design), climate-smart schools, health centres, sustainable urbanization (technical infrastructure), as well as communication,

12 Decision No.7562/QD-BYT of MOH, dated 24 December 2018.

13 Decision No.403/QD-TTg, dated 20 March 2014, of the Prime Minister on approving the National Green Growth Action Plan for 2014-2020.

and support for implementation. NSGG could also promote the subsequent investment plans of sectors (such as education, health) to mainstream children and address children's concerns.

3.3. Paris Agreement on Climate Change

In October 2016, the Prime Minister approved the Plan for Implementation of the Paris Agreement (PIPA)¹⁴ for 2016-2030.

Key directions of the PIPA and the relationship to children:

PIPA provided an overall plan for implementation of the Paris Agreement of Viet Nam. The overall work plans are carried out by line ministries and agencies. PIPA contains 68 tasks (priority, compulsory and encouraged) in the areas of mitigation, adaptation, human/technical, and financial resources, transparency (in terms of Measurement, Reporting and Verification), and policies and institutions for the pre-2020 and 2021-2030 periods. It is notable that MOET was assigned to take a lead in developing and implementing the curriculum on climate change in accordance with Paris Agreement requirements in the domestic education and training system¹⁵. However, this type of activity is not classified as compulsory, hence it lacks financial resources during implementation¹⁶. Viet Nam also developed nationally appropriate mitigation actions for nine areas: which include strengthening planning capacity for low carbon growth and for the waste sector, called "Waste to Resources for Cities" in Viet Nam.

¹⁴ Decision No. 2053/QĐ-TTg, 28 October 2016, on approving the Plan for Implementation of the Paris Agreement (PIPA) on Climate Change.

¹⁵ Activity No.40 in Decision No. 2053/QĐ-TTg.

¹⁶ Based on the interview with MOET.

3.4. National Adaptation Plan

The National Adaptation Plan (NAP) is formulated to identify specific adaptation solutions for different sectors to implement NDCs. The NAP 2021-2030, a vision to 2050 was recently approved¹⁷.

Key directions of the NAP and the relationship to children:

According to Decision No.1055/QĐ-TTg, the NAP aims to minimize vulnerability and risks to climate change impacts through strengthening resilience and adaptation capacity of the community, economic sectors and ecosystems. There are three key tasks in two phases: 2021-2025 and 2026-2030:

1. Enhance the efficiency of CCA through strengthening State management of climate change, particularly developing climate change law and promoting the integration of climate change into strategic systems and planning.
2. Strengthen the resilience and enhance community adaptation, economic entities and ecosystem components through investments in adaptation, science and technology actions, raising awareness to adapt to climate changes.
3. Mitigate natural disaster risks and minimize damage to respond to increasing disasters and extreme climate due to climate change.

The NAP focuses on six sectors: agriculture, disaster risk management (DRM), environment and biodiversity, water resources, infrastructure, other sectors (community healthcare, labour-society, culture, sports, tourism) and capacity building. Tasks to be implemented in 2021-2025 focus on: finalizing policies and mechanisms for climate change adaptation, preparing a regulatory framework and technical conditions for enhancing the integration of climate change

¹⁷ Decision No.1055/QĐ-TTg, 20 July 2020, on National Adaptation Plan on Climate Change 2021-2030, a vision to 2050.

adaptation into policies, strategies, plans, conducting prioritized tasks and solutions for increasing adaptive capacity, and reducing damage caused by natural disasters. Tasks to be implemented during 2026-2030 focus on strengthening coordination, integration of activities during implementation of assigned tasks and solutions, enhancing resilience of infrastructure, adaptive capacities of natural ecosystems and biodiversity, enhancing the recovery of natural ecosystems and protection, conservation of biodiversity in response to climate change, improving adaptive actions for co-benefits of reducing risks attributed to climate change and increasing social, economic and environmental efficiency. NAP provides a framework for future GoV activities that could mainstream the interests of children during implementation.

Gaps and opportunities for inclusion of children: Although the NAP does not mention children explicitly, more child-focussed activities could be added in some sectoral plans. Past and ongoing climate change and child-centred programme efforts could be expanded to assist the GoV in some sectors in NAP implementation. For example, Viet Nam Disaster Management Authority (VDMMA) commissioned the Child-Centred Risk Assessment (CCRA) in 2017-2018 with technical support from UNICEF Viet Nam under the project on Child-centred Disaster Risk Reduction. The assessment identified the most prominent natural hazards in Viet Nam, and mapped the risks posed to children in four provinces. As a result, the vulnerability of children to natural hazards was assessed by developing *ad-hoc* Composite Vulnerability Indicators, which aggregated up to 66 sub-indicators in seven different dimensions (education, nutrition, health, wealth, access to water and sanitation, infrastructure and emergency management). This project could be extended and scaled-up further to formulate evidence-based adaptation plans in different areas. Based on this, a child-sensitive needs assessment (or vulnerability assessment) could be further applied to several sectors of NAPs, such as natural disaster prevention, environment and biodiversity, water resources and community health care.

3.5. Law on Environmental Protection

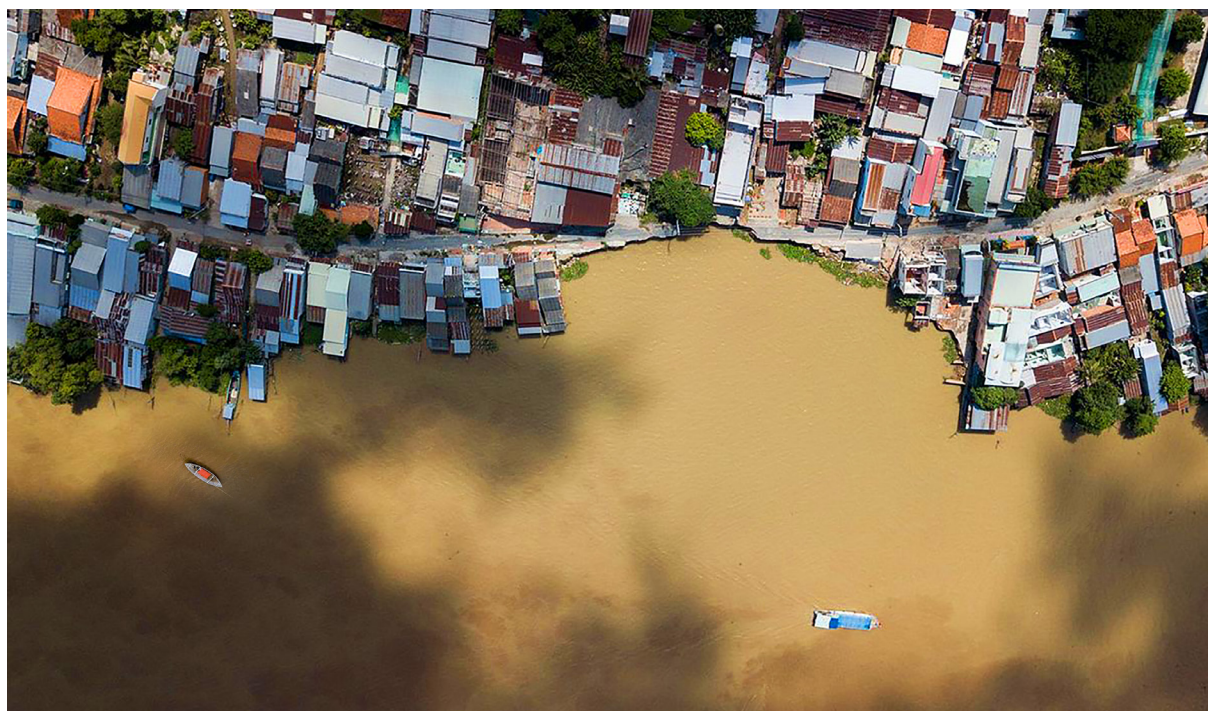
The Law on Environmental Protection (LEP) of Viet Nam was issued in 2020. It provides a legal framework for environmental protection, the rights, obligations and responsibilities of all agencies, organizations, households and individuals in environmental protection activities and State management of environmental protection.

Key directions of the LEP and the relationship to children:

Viet Nam's LEP stipulates (Article 4(2)) that environmental protection must harmonize with a number of economic, social and environmental matters, including protection of the rights of the child¹⁰⁶. Both the 2014 LEP and 2020 stipulate delivering environmental education in schools. This task has been implemented well in practice. A recent (Decision No. 2262/QĐ-BGDĐT in 2020) issued by MOET on the school curriculum regulates the need to educate children on environmental protection.

Gaps and opportunities for inclusion of children:

More could be done to scale-up good green school models available in Viet Nam, such as those promoted by Live & Learn, GreenID and UNICEF. With regard to environment and health, the LEP mentions the need to protect people's health from environmental degradation and pollution. Further attention should be paid to children's vulnerability to environmental pollution. More studies can be done on environmental impacts on children's health to formulate better strategies, particularly on air pollution in urban and rural areas, with close attention to how climate change can intensify these impacts.



3.6. Law on Natural Disaster Prevention and Control

The law, issued in 2013¹⁸, regulates natural disaster prevention, rights and obligations of agencies, organizations, households, individuals engaged in prevention activities, disaster prevention, State management and disaster preparedness measures. The law assigns the MOET to issue legal documents on integrating knowledge of natural disaster prevention and control into the curriculum at all levels. Amendment of the law was approved by the National Assembly in June 2020.

Key directions of the Law on Natural Disaster Prevention and Control and the relationship to children:

The amended law brings an important paradigm shift in DRR, especially in relation to children by highlighting:

- The impact of natural disasters on socio-economic development and vulnerable people
- Empowerment and the enhanced role of communities, people and volunteers in disaster management that would complement the efforts of central and local governments.
- Allocation of budget for DRR and preparedness, including development of strategies, baseline surveys and contingency budget at local levels, in addition to investment in hardware and responses.
- Establishment of “frontline volunteers for disaster management at commune level” with a mandate to strengthen community-level coordination on DRR, preparedness, responses and recovery.
- Importance of data, including baseline surveys for disaster management strategies,

¹⁸ The revised law was approved with reference No.60/2020/QH14, dated 17 June 2020, and will come into effect from 1 July 2021.

including on socio-economic development and institutional capacity of the DRM system.

- Enhancing communication and dissemination of information for awareness raising, including in ethnic minority languages.

Gaps and opportunities for inclusion of children:

Sub-laws, circulars and relevant guidelines need to be urgently developed to ensure priorities for children, their families and communities under amended segments of the law are implemented and capacities of authorities and communities are strengthened. It is notable that the law assigns MOLISA to mainstream gender issues into the Natural Disaster Prevention Plan of this ministry, but not children's issues. In the future, MOLISA should play a more active role in mainstreaming DRR and climate actions for and with children in collaboration with MONRE, MARD, MOET, MOH and other ministries. UNICEF has supported initiatives towards key objectives of national DRR and climate change action plans for children, which includes strengthening DRR and CCA knowledge and skills, development of a national strategy on DRR and CCA, and a national platform-DRR partnership that adheres to commitments to children.

3.7. Law on Children and Viet Nam National Commission on Children

The Law on Children (2016) stipulates rights and duties, principles and measures to ensure the enforcement of children's rights, and in relation to climate change. Article 31 states the rights of children to be protected from natural disasters, calamities and environmental pollution as well as their duties to protect the environment. In addition, Decree No.56/2017/NĐ-CP provides detailed guidance on implementation of the Law on Children.

Key directions of the Law on Children and the relationship to children:

The law requires ministries, ministerial-level agencies, organizations and people's committees at all levels to ensure child participation in the development and implementation of legal documents, policies, programmes and socio-economic development plans related to children through children's forums, councils and other innovative platforms. Specifically, children's forums every two years hold group discussions with children's representatives on various topics. This has broad implications and offers potential opportunities for children's rights to participate in policy dialogues and decision-making processes related to climate change issues that affect them.

To implement the law, the VNCC is an inter-ministerial coordination mechanism launched in 2017, chaired by a deputy prime minister with the ministers of MOLISA, MOET and MOH as vice chairs, that deals with children's rights. MOLISA serves as the standing office for the VNCC and is the ministry responsible for ensuring the committee's working conditions and personnel. VNCC is considered one of the most important milestones for children's rights and was set up to play an instrumental role in creating a new pathway for child rights implementation and to ensure "no child is left behind" in achievement of the SDGs.

Gaps and opportunities for inclusion of children:

The National Programme of Action on Children (NPAC) (2012-2020), has five sub-programmes on various issues affecting children, such as labour, in addition to other related target programmes on developing social protection systems during 2016-2020¹⁹. In particular, there is a programme to promote children's participation in issues that affect them, which highlights children's needs in policies and regulations. However, it is notable that MONRE (in charge of environmental and climate change issues) does not participate in these programmes, so the inclusion of children's

¹⁹ Decision No.QĐ 565QĐ-TTg, 25 April 2017.

voices in climate change issues is limited. The MONRE should be more involved in such programmes to better integrate children's issues and roles into climate change. Some UNICEF and MPI initiatives to facilitate collaboration between MONRE and MOLISA should be considered. In addition MARD and MONRE, key to the integration of CCA and mitigation issues, as non-members cannot ensure such issues are part of VNCC's working agenda.

Also, within the aforementioned Law on Children regulations, children are recognized consistently as a vulnerable group mainly linked to diseases, malnutrition and physical vulnerabilities, disruptions to education and health services, with impacts on child development. However, the scope of children with special backgrounds stipulated in Clause 1, Article 10 does not cover children suffering from disasters or other climate change impacts. This point maybe considered in the process of implementing or revising the law.

3.8. Technology Needs Assessments

The TNA was conducted for Viet Nam in 2012¹⁰⁷ and in 2017. The TNA project is an item of the Poznan Strategic Programme on Technology Transfer, proposed by GEF, to help countries develop and update and prioritize technology needs according to Article 4.5 of the UNFCCC. This assessment can form the basis for a portfolio of climate change mitigation and adaptation technology projects and programmes to facilitate the transfer of, and access to, the selected mitigation and adaptation technologies. The project's specific goals include: i) identifying and prioritizing adaptation and mitigation technologies, and contributing to national SDGs, ii) identifying barriers to the acquisition, deployment and diffusion of prioritized technologies and iii) developing plans (Technology Action Plan) to overcome barriers and facilitate the transfer, adoption and diffusion of selected technologies in participant countries.

Gaps and opportunities for inclusion of children:

Using United Nations Environment Programme guidelines and in the framework of TNA implementation to adapt to climate change, priority areas were selected to evaluate technology priorities, including agriculture, LULUCF, water resources and coastal zone management. Most relevant to the CLAC is water resources and one area in particular, that is "Rooftop rainfall harvesting for household usage" and "Harvesting runoff water". The development of integrated water resources management will enhance adaptive capacities of human communities and natural ecosystems to climate change, increase living standards and ensure water security and sustainable water resources development. The development of CCA technologies in water resources management will work towards ensuring water security, poverty alleviation, social security, public healthcare, enhanced living standards and the protection of water sources in the context of climate change. An entry point for action, especially in these areas, is a change in water use behaviours, in areas where urban residents are not in the habit of using rainwater or using water efficiently. Another entry point is to organize public awareness-raising campaigns and work with the MOET on preparation of teaching materials to mainstream water usage into official educational programmes.

4. OPPORTUNITIES FOR ACTION FOR CHILD-CENTRED CLIMATE CHANGE INTERVENTIONS



This section further builds on the gaps and opportunities identified in Section 3. While the latter is primarily based on a review of relevant policies, strategies and action plans regarding the inclusion of children, Section 4 is informed by data collected during interviews with key stakeholders. Its purpose is to highlight key policies and areas where support and interventions that focus on children and their vulnerability to climate change impacts and environmental degradation can have the most impact. Potential opportunities for action are highlighted in a series of tables. These opportunities largely centre on collaborative action with a range of different stakeholders to create synergies for progressive action to advance the rights and well-being of children in the context of climate change. Potential opportunities for further research are also identified.

4.1. Overarching policy and partnership frameworks and coordination

Synergies can be created between MPI-UNICEF and other stakeholders in GoV organizations, civil society and the private sector. Data collected for the CLAC revealed numerous opportunities for MPI-UNICEF to support, collaborate or work in partnership with others to build on, advocate for and help create an enabling environment for the inclusion of children's needs in climate change and environmental policies and action. To create and ensure this enabling environment, there needs to be:

1. Increased levels of awareness by all stakeholders on the importance of child-focused climate change action
2. Strategies and action plans that cross sectors and include multi-stakeholders
3. Inclusion of children's opinions and voices in vulnerability assessments and climate change issues to inform policies, strategies and action
4. Commitment by government stakeholders and development practitioners to generate and use climate and environmental impact data for evidence-based policy and strategic interventions
5. Increased budget and resources for CC
6. Strengthen partnerships, including with the private sector and CSOs, for concerted and consistent efforts, plus resources for addressing CC.

4.1.1. Socio-Economic Development Plan and Sustainable Development Goals

A strong partnership between MPI (takes lead in development of SEDS and SEDP) and UNICEF is critical to mainstream climate change impacts on children and children's participation into the SEDP/S. The GoV is currently formulating the next 10-year SEDS and five-year SEDP. The effective implementation of objectives, targets and tasks outlined in the national SEDS, SEDP and sectoral plans is key to the achievement of SDGs by 2030. Addressing climate change in a child-sensitive manner needs to be officially stated in guiding documents on developing SEDP by leveraging relations with the MPI and MONRE as well as partnerships with other development partners, including ADB, UNDP and CCWG networks (see *Appendix 2, Table 1. Key Opportunities for action under the SEDP and SDG*).

4.1.2. Nationally Determined Contributions partnership

In April 2016, each member country made its commitments to the Paris Agreement through NDCs with two target outcomes: reducing GHG emissions (mitigation) and building resilience against the negative impacts of a changing climate (adaptation). Viet Nam became a member of the NDC Partnership in 2016 and

UNICEF recently became a member in February 2020. Focal points for the NDC are the MONRE and MPI. The NDC Partnership is potentially a high impact area for action since it provides a high-level opportunity to integrate child rights into national climate change frameworks and strategies and to support integration of climate risk monitoring. Current revisions to the NDC provide an opportunity for stakeholders to have critical input¹⁰⁸. There is also potential to act on MONRE's request to the NDC Partnership for additional support on PIPA tasks. The MONRE and MPI set out priority areas that require support from development partners, with support mapping indicating projects that contribute to PIPA tasks and lists stakeholders involved, some of which are directly relevant for collaborative inputs (see Appendix 2, Table 2a Summary of key actions by different stakeholders and Table 2b Key opportunities for inputs into NDC and NAP).

The GoV (through MONRE) made a request to the NDC partnership in August 2018 for PIPA process support and 12 organizations responded with priority PIPA tasks. There was strong interest to support implementation of the National Target Programme to Respond to Climate Change and Green Growth²⁰ and the National Adaptation Plan²¹.

The GoV recently updated the NDC by reviewing and upgrading the current targets and priority tasks²². With UNICEF's support, Viet Nam's final NDC has a dedicated paragraph on children – with references made to WASH, the impact of heat waves and air pollution on child health and nutrition, education and child protection. This particular section recognizes the vulnerabilities of children as well as who is most vulnerable – children with disabilities,

children in poor families, migrant children and girls. The NDC has a strong component of DRR under the overall CCA umbrella. It focuses on the particular vulnerabilities in the Mekong Delta region due to drought and saltwater intrusion (with specific mention of impacts on children), community-based models and the need for communication and awareness raising as well as sectoral investment plans. The inclusion of children in Viet Nam's NDC (July 2020) is one step in the right direction. The technical report is expected to define a more detailed set of actions for subsequent implementation of NDC in Viet Nam. While the recognition of the sensitivity of children to climate change and its impacts was an important milestone, UNICEF and other development partners continue to encourage the GoV to strive for a more ambitious agenda, particularly taking the opportunity of COVID-19 to build back better for a more healthy, resilient and sustainable future for children – one that builds towards a low carbon economy and clean environment.

Gaps and opportunities for inclusion of children:

For the adaptation component of the NDC, more actions on children and the roadmap for implementation should be developed, integrated into sectoral and provincial/regional adaptation plans and linked to sectoral investment plans. This requires active participation of key ministries, responsible for the well-being of children in Viet Nam (MOLISA, MOET, MARD) with support from partners, such as UNICEF, who have the expertise and good practices on children. The role of children should be promoted in several sectoral mitigation actions, such as in energy, agriculture and transportation.

As a member of the NDC Partnership, UNICEF and others can support improved climate risk monitoring data integration into national climate systems, including the number of children without access to basic necessities (WASH) and also action areas for potential positive impacts and outcomes on children. Additional areas for support could include climate-smart social security programmes (social protection) incorporating indigenous knowledge and ecosystem-based adaptation for communities (in

20 Asian Development Bank (ADB), Agence française de développement (AFD), Danish Government (DK), German Government (GER), Global Green Growth Institute (GGGI), International Renewable Energy Agency (IRENA), United Nations Development Programme (UNDP), the World Bank (WB), World Resource Institute (WRI)

21 ADB, AFD, FAO, GER, UNDP, WB

22 Prime Minister approved the updated NDC on 24 July 2020, in which Viet Nam committed to reduce GHG by 9 per cent compared to Business-as-Usual (BAU) by 2030.

the Mekong Delta). (more details about potential areas for contributing to child-centred climate change action are outlined under Appendix 2, Table 3a Selection of tasks in PIPA requested support for implementation and Table 3b Post 2020 projects supported by development partners that contribute to the PIPA).

4.1.3. Green Growth Strategy

National Strategy on Green Growth for the period of 2021-2030 with a vision to 2050:

The MPI is designated as the standing vice head of the Coordinating Board with the ministers of MOF, MOIT, MARD and MONRE as vice heads. The MPI is responsible to guide, monitor, evaluate, consolidate and review the implementation of the strategy and report to the Prime Minister on a regular basis as well as organize the five-year reviews, mid-term review in 2020 and final review in 2030 (see Appendix 2, Table 4, Key Opportunities for Input into the Green Growth (GG) Strategy and Energy Sector).

4.2. Priorities and approaches by sectors

Government sectors that potentially could play key roles in the inclusion of children in climate change policy, strategies and plans include: i) education (MOET), ii) health (MOH), iii) child protection and social protection (MOLISA). Of relevance to the CLAC, are the 10-year Education Sector Plan (MOET), Health Sector Action Plan (MOH) and child protection laws and regulations (MOLISA).

UNICEF support in the health, education and child protection sectors has resulted in: i) a climate-resilient WASH strategy, ii) a climate-smart schools programme and integration of DRR into school curriculum and child protection strategies in humanitarian interventions. Other key UNICEF contributions to children and the climate change agenda include development of a national platform for DRR and CCA¹⁰⁹, awareness raising and participation of children and adolescents, and strengthening GoV

capacity for emergency preparedness and responses that adhere to core commitments to children¹¹⁰. More overarching work by UNICEF includes work on Public Finance for Children (PF4C) to achieve strategic results across all areas of programming. Strengthening collaboration with MOH, MOET and MOLISA are key to continuing progress in these sectors. In addition, now that UNICEF is accredited for the GCF Readiness programme, working with the MPI – focal point for the GCF and the Readiness Programme, will be important to scale-up to different sectoral areas.

4.2.1. Education

Overview: The MOET is currently reformulating the 10-Year Education Sector Plan. The 2011-2020 Education Development Strategy reported many achievements during this period, including the increased number of children attending school: pre-school (72 to 98 per cent), lower secondary school (70 to 83 per cent) and upper secondary school (33 to 50 per cent). Since 2017, the GoV has adopted the Comprehensive Safe School Framework (CSSF) as part of the ASEAN Safe Schools Initiative (ASSI) and in 2018, the MOET approved the DRR/CCA Safe School curriculum rolled-out to all 63 provinces. The Safe School model and Safe School guidelines are led by MOET in collaboration with UNICEF, Plan International and other international organizations. At the start of the 2019-2020 school year, students at all levels of education (pre-school to secondary) used the new curriculum to contribute to increased DRR awareness and resilience of students, teachers, schools and the education system as a whole¹¹¹. This new curriculum is being introduced at a critical time, with increased risks of disasters due to climate change.

A best practice noted in the evaluation of UNICEF's DRR Programming in Education in East Asia and the Pacific¹¹² is the partnership between MARD and MOET, supported by UNICEF, that provides "effective, coordinated and collaborative interventions" in DRR in education, such as child vulnerability mapping and analysis, and communication for development strategy.

In terms of gender, girls and women were found to be empowered and included in local DRR processes, something that was confirmed during an evaluation that included meetings and interviews with teachers and students¹¹³. Gender equality and use of disaggregated data is generally mainstreamed into DRR for education interventions and efforts to achieve gender balance were noted by local DRR committees.

The 2011-2020 Education Development Strategy noted challenges, namely that teaching and learning methods were slow to change, that curriculum was mostly theoretical and outdated, and that schools did not attach importance to life skills education and promotion of creativity¹¹⁴. These outcomes impact children's opportunities to express themselves, to be active participants in issues that affect them and to learn about current events, such as climate change impacts.

It was also observed that while the GoV's commitment is strong at central level, such leadership and budget have not translated to provincial and district levels. The lack of GoV financial and technical capacity to implement laws, strategies and action plans at decentralized level could potentially reduce the intended long-term benefits of DRR in the education system. It is also important that DRR strategies recognize the specific and separate nature of CCA – so long-term impacts associated with climate change are not subsumed under DRR strategies. The UNICEF Mid-term Review (MTR) noted and interviews revealed that while integration of DRR was successful, there was not a similar emphasis on CCA in the curriculum. There is a lack of recognition of important differences between the two and that different approaches in policy and strategy are required.

Opportunities: The education division within UNICEF Viet Nam is working on the next phase of the education plan for the country programme and building on curriculum development, teacher training, safe schools, climate-smart schools, green habits and solar panels in schools. Information gathered during CLAC revealed several ongoing initiatives by other organizations to work towards a similar goal: for example, the

NGO Live & Learn is working to integrate the green school model into school curricula and is receptive to sharing learning with UNICEF on this common vision and suggested it could use support with an organization to liaise between it and MOET. It is recognized that UNICEF's added value is its broad network and breadth of experience in the education sector. It is also recognized there is benefit from working with NGOs (such as ChangeVN) on innovative ideas, such as the 50:50 model for electricity savings, which is a nine-step methodology that aims to achieve energy and financial savings in school buildings, by actively involving students and teachers in energy management and environmentally-friendly behaviour through practical actions. There is also a high level of private sector interest to invest in renewable power and initial investments have been made. This translates into interest by some companies to work with organizations also involved in renewable energy, which shows good potential for synergies.

Another opportunity is to work with MOET (Department of Science, Technology and Environment - DSTE) together with UNESCO and the University of Ha Noi on an Environmental Education (EE) plan. Since the 1990s, the GoV has taken into account EE and sustainable development through the National Plan for Environment and Sustainable Development. The integration of climate change into the EE plan is critical and an opportunity to flag specific CCA issues within school curricula. To learn more about effective integration strategies, there is scope to work with UN Women and local gender-focussed NGOs as well as INGOs such as Plan International, that focus on gender transformation. Gender equality has been mainstreamed effectively within many government institutions and programmes and using these methods in education programming may assist with mainstreaming climate change programming within ministries.

4.2.2. Health

Overview: The Climate Change Response Action Plan of the Health Sector was developed

by MOH and MONRE to respond to climate change during 2019-2030, with a vision to 2050. It is designed to improve the health sector's ability to prevent and mitigate risk factors in the environment and climate, contributing to the protection, care and improvement of people's health. The action plan consists of seven main objectives and 29 specific tasks with an estimated budget of VND 2,000 billion for 2019-2030. VIHEMA is designated as the focal point with close coordination of MOH's line departments/agencies.

On national level multi-sectoral coordination, MOH works with MARD on the implementation of the 2016-2025 NTP for Rural Water Supply and Sanitation, with priority given to water supply for health facilities and areas affected by climate change. MOH and MOET coordinate to track and monitor nutrition conditions, interventions and health care for children and students in areas affected by climate change. MOH and MONRE integrate health care adaptation activities in NTP and climate change projects, guide local-level implementation, share weather and climate databases, map areas with human health affected by climate change, enhance waste management, GHG emission mitigation, use of clean and renewable energy in health facilities as well as implement measures to mitigate air pollution public health impacts. MOH and MOLISA work on child health and nutrition, and finally, MOH and the Ministry of Information and Communication (MOIC) collaborate on mass media and press communication on climate impacts on human health.

The health sector has integrated climate change resilience into a number of action plans, including implementation of the Viet Nam National Hygiene and People's Health Improvement Movement, Green Clean Beautiful Health Facilities programme, Malaria Prevention Action Plan (2015-2020), National Nutrition

Action Plan until 2020, and 2015-2020 Action Plan for Disaster Preparedness and Response for the health sector¹¹⁵.

Opportunities: The inter-sectoral nature of the health sector, (as described in the case study below) with many ministries working together is an opportunity to build a coordinating mechanism to share knowledge and build synergy for action. A key task identified in Resolution 120 for the Mekong is for MOH to cooperate with people's committees of provinces and cities of the Mekong Delta to review health facility network planning – paying particular attention to responding to the health care demand, improving hygiene conditions and controlling drinking and domestic water quality in the context of climate change. This is an opportunity for MPI-UNICEF to underscore the vulnerability of children and the critical need for these amenities to safeguard children's health and well-being. There are also identified opportunities to assist VIHEMA to implement the Climate Change Response Action Plan at provincial level, an area where UNICEF could use its sub-national level network to support the action plan.

Case Study: VIHEMA and the Climate Change Response Action Plan

The MOH's Viet Nam Health and Environmental Management Agency (VIHEMA) is actively working on a climate change strategy after developing the Climate Change Response Action Plan of the Health Sector for 2019-2030, with a vision to 2050. The action plan underlines the importance of targeted research and multi-sectoral coordination at national level, involving several ministries: MPI, MONRE, MARD, MOF, MOIC and socio-political organizations and associations as well as local level municipal people's committees and provincial level departments of health. One of VIHEMA's objectives in targeting the most vulnerable, including children, is "to build and manage databases, maps of areas whose citizen's health is affected by climate change, and software for monitoring, forecasting and early warning of climate impacts on human health". As outlined in the action plan, there is an opportunity to target children "to bolster scientific research on climate change impacts on human health and response solutions for the health sector: by conducting research on groups vulnerable to climate impacts (according to gender, ethnic minority groups, children, and women) in affected areas".

4.2.3. Water, Sanitation and Hygiene

Overview: Viet Nam's population of 97.4 million people has benefitted from significant improvements in WASH services. However, a high number of citizens still lack access to basic services. For example, in 2017, 93 per cent of the rural population and 84 per cent of the poorest groups had access to improved water supply, compared to 99 per cent of the urban population. Access to basic sanitation facilities mirrors this trend, with 78 per cent for the rural population and 41 per cent for the poor, compared to 94 per cent for urban inhabitants. Additionally, 82 per cent of the rural population and 64 per cent of the poor practiced basic hygiene, compared to 93 per cent of the urban population¹¹⁶. Moreover, in 2019, 10.7 million people across Viet Nam (10.15 million in rural areas and 550,000 in urban areas) still practiced open defecation²³. The volume of untreated wastewater, including fecal slurry, remains a severe environmental and public health hazard, and is a major management challenge. In addition, the geographic coverage of WASH services in Viet Nam is somewhat determined by income level, ethnicity and location.

Guaranteeing access to safe water and ensuring environmental sanitation in rural areas in the context of climate change and extreme weather events are included in the sanitation component of the NTP for Rural Water Supply and Sanitation for 2006-2010 and 2012-2015. MOH works with MARD to implement the NTP for New Rural Development, which covers nutrition interventions for stunting reduction, safe water, and rural environmental sanitation within the overall objective of building a rural areas to include modern socio-economic infrastructure, to develop industries and services and to ensure stability and protection of the environment and ensure material and spiritual well-being¹¹⁷. During 2010-2020, the NTP aimed to ensure a safe water supply and environmental sanitation

23 UNICEF's calculation based on the 2018 Viet Nam Household Living Standard Survey.

in rural areas for cleanliness and hygiene for residential areas, schools, health stations, working offices and public service zones.

Opportunities: The UNICEF Global programme, together with the Global Water Partnership (GWP), developed the Strategic Framework for WASH Climate Resilient Development¹¹⁸. The framework addresses climate resilience as a cross-cutting issue that encompasses elements of DRR and CCA (WASH Climate Resilient Development: Integrating climate resilience into national WASH strategies and plans, 2015, updated 2017¹¹⁹). The approach advocated by the strategic framework is to apply a climate lens to national WASH strategies and plans. Underpinning the framework is the promotion of water treatment and safe water storage by households as one of the critical life-saving skills and a low-cost option in resilience and adaptation initiatives. UNICEF's WASH implementation plan includes result areas and activities that attempt to mainstream DRR and CCA. In addition, specific interventions such as Open Defecation Free (ODF), Water Safety Plan (WSP) and Household Water Treatment and Safe Storage (HWTS) are intended to increase resilience to disaster risks and climate change. Increased awareness of the climate resilient WASH strategy will be necessary for its application and integration into WASH interventions supported by other organizations in Viet Nam. For synergies and support, SNV and Save the Children are involved in WASH programmes and could benefit from the climate resilient strategy developed by UNICEF. Moreover, UNICEF could also advocate to MOH/MARD for use of the climate resilient WASH framework in the NTP and better "follow through" financing for WASH in conjunction with other international financial institutions and bilateral partners. Financial challenges to the WASH sector stem from discrepancies in budget and control at different levels of government. Capital investment for infrastructure development is provided by central and provincial governments, but planning and budgeting processes do not take into account operational costs of repair and maintenance or depreciation impacts. The central government provides new



infrastructure, then transfers assets to a lower level of government, that may not have the operational expenditure budget¹²⁰. There are also opportunities to work with MARD to further strengthen its capacity in forecasting disasters, early warning, research on CCA technology as well as replication of appropriate community-based CCA models at a wider scale.

4.2.4. Social protection

Overview: The Law on Children, as outlined previously, is designed to provide a legal foundation for children's rights in Viet Nam by providing guidelines and policies to ensure enforcement of children's rights in accordance with the UN CRC.

The objectives of Viet Nam's social protection system are to ensure that all people have access to and benefit from social security policies and a minimum living standard to contribute to sustainable poverty reduction, political and social stabilization. The system gives priority to several vulnerable groups including, among others, children, people living in remote, mountainous and ethnic minority areas and those affected by disasters¹²¹.

Opportunities: The study done by MOLISA titled “*Building a shock responsive social protection system in Viet Nam with focus on children*” identified gaps in the social assistance system and made recommendations for better preparation and response to natural and climate-related disasters. The National Programme on Child Protection 2021-2025 (to 2030) is being renewed by MOLISA and there is a renewed commitment to mainstream climate change risks in next term’s National Strategy on Social Protection. The GoV is receptive to the benefits of support to operationalize shock-responsive social protection as well as expand the coverage of social assistance to children 0-3 years as well as vulnerable children¹²². UNICEF’s Child and Social Protection strategy considers climate change-related outcomes that are aligned with development and humanitarian objectives. The objectives include developing a climate-resilient social assistance system, strengthening child protection in emergencies, and public advocacy on DRR (see Appendix 2, Table 5. *Key Opportunities for Sectoral Contributions for Child and Social Protection*).

4.2.5. Environmental and natural resources

Overview: With the 2014 amendment and release of the **Law on Environmental Protection** (LEP), there is a greater awareness of sustainable development, environmental and climate change concerns, triggered by international framework agendas such as the Paris Agreement, 2030 Agenda on Sustainable Development, and Nagoya Protocol.

The LEP 2014 was unable to effectively tackle environmental pollution, so Viet Nam’s National Assembly passed a decision on the revision of the law in June 2019 to reinforce its impact and strengthen compliance. Besides improved regulations and permits, economic instruments, environmental impact assessments and institutional governance, one focus is updating the chapter on climate change (Chapter 4). MONRE was assigned as the lead agency for the revision, with the Viet Nam Environment

Administration (VEA) coordinating the process among all relevant departments and stakeholders¹²³.

Opportunities: The LEP mentions children as part of a “vulnerable group”. In the current revision of the law, MONRE will include a social impact assessment and consultations with communities. VEA and MONRE have conducted several workshops and consultations on the alignment between climate change and environmental protection, in order to harmonize the law’s contents linked to Viet Nam’s NDCs and other climate mitigation policies. MONRE organized a consultation with development partners in October 2019, however, UNICEF was not present. During data collection for the CLAC, it was determined that ISPONRE will put UNICEF in touch with the drafting committee so it can prepare written comments.

Civil society in Viet Nam is very active on the issue of air pollution. The NGO, ChangeVN (Centre of Hands on Actions and Networking for Growth and Environment) focuses on air pollution in HCMC and currently partners UNICEF’s HCMC office. ChangeVN uses the approach of sending key media messages to government, in particular using the channels and newspapers that government policy-makers are required to view. It has developed a video on air pollution impacts it would like UNICEF to use and promote.

Another NGO, Youth Connected for Clean Air Network (YCCAN) is a local organization similarly concerned with air quality in HCMC. It focuses on youth empowerment as “youth are the workforce of the future”. Other opportunities for action with MONRE and other NGOs are shown in Table 6, Appendix 2.

Case Study: Private sector and social-environmental responsibility in Viet Nam

IKEA, a Swedish multi-national home furnishing company, operates in an environmentally sustainable way. IKEA's goal is to source all its wood from sustainable sources by the end of 2020. Sustainable wood is either wood that is certified by the Forest Stewardship Council (FSC)²⁴ or recycled. In Viet Nam, IKEA reached this goal for Acacia wood in 2017. IKEA works in partnership with WWF and they have worked together in Viet Nam since 2008 to promote responsible forest management, good governance and transparency in the global timber trade to ensure that forests are safeguarded for present and future needs. In Viet Nam, the partnership has helped facilitate and improve the sustainable supply chain of FSC-certified timber, from local suppliers including smallholders and forest plantation companies. The IKEA commitment to become people and planet positive by 2030 has four main focus areas: i) becoming climate positive – reducing more GHG emissions that the IKEA value chain emits, ii) transforming in to a circular business, iii) creating a positive social impact for everyone across the IKEA value chain and iv) inspiring and enabling more than one billion people to live a better everyday life within the limits of the planet. IKEA is also investing in transforming the IKEA supply chain into using renewable energy and removing carbon from the atmosphere through reforestation, restoration of forests and better forest management. IKEA feels that as a part of creating a positive social impact for everyone, gender equality, children's rights and working opportunities for young people need to become a reality. IKEA has been involved in two projects in relation to child rights and young workers in partnership with CCR-CSR (Centre of Child Rights and Corporate Social Responsibility).

24 FSC certifies forests all over the world to ensure they meet the highest environmental and social standards.

National Biodiversity Strategy and Action Plan

Overview: The Viet Nam National Biodiversity Strategy to 2020 with a vision to 2030 follows a series of Biodiversity Action Plans (1995 and 2007 (2010 with vision to 2020). After three years' implementation of the 2007 version, MONRE conducted a review that found a number of achievements in biodiversity conservation (such as the increase in areas of protected ecosystems), but also a number of challenges, including the pressure on biodiversity from rapid economic growth.

Opportunities: In general, knowledge sharing and collaboration with like-minded organizations and those working exclusively on environment issues (such as Conservation International and WWF) are the most likely avenues for MPI-UNICEF to pursue. The value-added by UNICEF is the ability to elaborate on the impacts of environmental degradation on children's health and well-being. More specific opportunities are outlined in Table 6, Appendix 2.

4.3. Cross-sectoral coordination and governance

4.3.1. Inter-sectoral coordination mechanism

The analyses in Sections 3 and 4 show that cross-sectoral coordination within GoV agencies is needed to promote the child-centred approach in response to climate change. The current coordination platform should be strengthened to meet these needs. There are potential opportunities as follows:

1. Strengthen the VNCC by adding MONRE as a member. This committee has a mandate to provide the Prime Minister with important policy recommendations on children. Therefore the inclusion of MONRE, responsible for climate change issues, will bring perspectives on climate change into child-related policies.

2. Provide support to MOLISA and MONRE to promote the interests of children in climate change policies and conversely, to promote climate change in child policy. This will help MOLISA and MONRE play more active roles in initiating new policies and projects that integrate climate change and children and raise issues for discussions in the meetings of the National Committee on Climate Change as well as with other line ministries and local authorities.
3. Provide support regional actions on children and climate change, which requires a collaboration of various ministries as well as local authorities.

4.3.2. Child participation

The 2016 **Law on Children** has a variety of provisions that aim to comprehensively intensify the enforcement of children's rights. In doing so, the law promotes child, adolescent and youth participation:

- Article 5, section 4: Respect, listen, consider and respond to children's proposals and Article 5, section 5: Consider ideas of children and those of relevant agencies and organizations while establishing policies and laws affecting children. Combine goals or objectives regarding children in national, sector and local socio-economic development plans.
- Article 46, section 1: The government ensures children's right to access information and state their opinions and expectations, find out, learn and exchange their knowledge via appropriate information and communication channels.

Most importantly, Chapter V (Articles 74 through to 78) is dedicated to children's participation in issues involving children. Of particular note is Article 77, section 2e, which states that organizations representing the voice of children, "Submit annual reports to the National Assembly's Committee for Culture,

Education, Youth, Adolescents and Children and to MOLISA on the performance of responsibilities for handling of children's opinions and proposals by agencies and organizations". Furthermore, the law gives directives to MOH, MOET, MOIC and others regarding children's needs, including participation.

In the NAP for children for 2012-2020 (Decision No.1555), major activities include communications, education and social advocacy to raise awareness and transform behaviour with regards to child rights.

Opportunities: For action on child participation issues, advocacy should focus on the forthcoming National Strategy on Children and the City Programme of Action on Children (Da Nang and HCMC). As mentioned earlier, collaboration with GIZ in the NDC partnership to ensure there is youth participation in NDC consultations is an opportunity to have an impact.

This is an area where it is key that NGOs, local and international, are seen as collaborators as there is ongoing work and activities in this area and opportunities exist for support and synergy. For example, UNICEF is currently working with the Saigon Innovation Hub to engage children to find solutions to issues that they identify.

ChangeVN also takes the approach that children are 'change agents' and have an important role to advance policy advocacy on air pollution. Many NGOs including Plan International, Save the Children, Live & Learn and ChangeVN have been working on environmental education and also advocating for children to be change agents. Training involves equipping children with communication and debating skills to raise their voice. The children's forum is an important venue to share ideas on how to collectively work to increase children's participation in policy and planning around climate change issues. More specific opportunities are outlined in Table 7, Appendix 2.

4.3.3. Advocacy and awareness raising

The National Programme of Action on Children has **implementation solutions that underline the significance of advocacy and education to raise awareness of the importance** of children's protection, care and education and the exercising of children's rights.

UNICEF is well positioned to take an advocacy role and provide a key support function when it comes to highlighting the needs of children and their vulnerability to climate change impacts. **Social behaviour change communication (SBCC) involves the strategic use of communication approaches to promote changes in knowledge, attitudes, norms, beliefs and behaviours¹²⁴. Social behavioural change is important for climate change and DRR, for example to encourage** specific actions required of affected communities for action, adaptation, prevention, containment and control. Communities need to be informed, motivated and equipped to practice the necessary protective behaviours, and this can be achieved through effective SBCC programming. SBCC can also play a role in addressing other aspects of social change, such as climate change and more importantly, advocating for children's rights in climate change and their participation in advocating for themselves. An opportunity exists to draw on what SBCC has to offer for child, adolescent and youth engagement as a crucial component of public awareness of the multi-sector nature of children's issues with regard to climate change at national and sub-national levels. More specific opportunities are outlined in Table 8, Appendix 2.

4.4. Sub-national priorities and approaches: Mekong region, Ninh Thuan province and Da Nang city

As discussed in Section 2, some regions experience the severity of climate change impacts more than others. At a sub-national level, there are some regions with priorities for CCA interventions and some that prioritize mitigation interventions. For this CLAC, the Mekong Delta region, the urban setting of Da Nang and Ninh Thuan province were considered for their vulnerability to climate change impacts and their policy responses. Data collection during the CLAC revealed several ongoing initiatives by other development partners, donors and NGOs working in these areas, which provide opportunities for shared learning and collaboration. Da Nang is one of the cities actively adopting mitigation options through clean energy initiatives and Ninh Thuan is the province with the largest investment in renewable energy, very much in line with Viet Nam's NDC and other climate change strategies that include mitigation and adaptation.

4.4.1. Mekong Delta region

Overview: In the past few years, Viet Nam has introduced many policies and implemented projects to develop the Mekong Delta's potential for socio-economic development¹²⁵. As a region highly vulnerable to climate change impacts and environmental degradation, the GoV is currently working on a holistic approach to integrated and sustainable management of the Mekong Delta¹²⁶. To date, however, regional implementation in the delta has been unsystematic¹²⁷, marked by a lack of coordination between national authorities and provinces as well as a lack of cooperation between provinces.

In Resolution 120, it is acknowledged that the intensity of economic development in the region has led to environmental pollution, land subsidence, groundwater level declines, coastal encroachment and reductions in areas of natural forests (especially mangrove forests) leading to severe ecological imbalances¹²⁸. It is also acknowledged that implementation of 2016

Decision (No.593/QĐ-TTg) on regional socio-economic development during 2016-2020 was slow, as was the master plan for socio-economic development. The vision towards 2100 includes resilience to climate change, the “proper” use of natural resources and the conservation of biodiversity.

As discussed in Section 2, the loss of biodiversity and associated ecosystem services clearly have detrimental impacts on children’s well-being. The resolution proposes to work inter-sectorally and inter-regionally on policies and strategies, master plans, plans, programmes, schemes, projects and tasks for sustainable and climate-resilient development of the Mekong Delta. For example, MONRE is to take charge and cooperate with other ministries and relevant authorities to review data and conduct a baseline survey of natural resources and environment of the Mekong Delta. MONRE is to work with the MPI to prepare the master plan for sustainable and climate-resilient development of the Mekong Delta until 2030 with a vision towards 2050 and with MARD to formulate a master plan for climate resilient sustainable agriculture in the region.

A GIZ project supports Vietnamese partners to establish an “institutional framework for the regional coordination of climate-resilient development in the Mekong Delta”. GIZ provides policy, planning and technical advice to help clarify mandates, responsibilities and interfaces. The project also incorporates a coordinated package of training measures for GoV officials and others. The project builds on a holistic regional approach to coastal planning developed in an earlier project on integrated coastal management in Viet Nam (Integrated Coastal Management Programme, ICMP). This inter-provincial focus on the coast is now being extended to include all 13 provinces of the Mekong Delta¹²⁹.

Opportunities: In general, support is needed for broad cooperation in sustainable and climate-resilient development of Mekong Delta sub-regions by promoting cross-sectoral interactions specific to children’s issues within

a multi-sectoral, multi-provincial management plan. There is an opportunity to channel the ambitious vision of a climate-resilient and prosperous Mekong Delta to incorporate CCA strategies that go beyond DRR and that focus on feasible strategies that benefit the most vulnerable. The resolution and Mekong Delta planning²⁵ contain all the right intentions for the promise of sustainable development and economic growth, while conserving biodiversity and increasing agriculture production – but it is one thing to say something and quite another to act on it. The plans are very ambitious and it will take experience and skill to ensure that a sustainable and prosperous Mekong Delta is achieved, while still meeting the needs of children and other vulnerable groups in the region who are most impacted by climate change and environmental degradation.

One example of collaboration (see Table 8 for other opportunities) is with SNV that also works in the Mekong region. It is conducting participatory vulnerability assessments to promote community-based climate change initiatives. These assessments are a potential entry point to integrate children’s needs into strategies and plans. SNV had, in the past, worked on WASH in the Mekong, a key area for UNICEF.

4.4.2 Da Nang city

Overview: More than half of Viet Nam’s population is expected to live in cities by 2030, as the country experiences rapid urbanization and fast-changing urban development patterns. With approximately 75 per cent of Viet Nam’s urban population living in the Low Elevation Coastal Zones, many urban dwellers will be also affected by rising sea levels, increasing coastal salinization, flood risks and related adaptation challenges.

In the city’s planning strategies, much attention is paid to climate change. The GoV approved (2015) the task of adjusting the general planning

²⁵ Decision No.1163/QĐ-TTg (31 July 2020) of the Prime Minister for Mekong Delta Planning for the period of 2021-2030 with a vision to 2050

of Da Nang city by 2030 with a vision towards 2045. Included in the plan are key research requirements for the general planning of Da Nang city to ensure that development is in line with the requirements of sustainable marine economic development strategy, smart city development, and sustainable city development overall. Also, solutions are required for shortcomings in technical infrastructure overloads, especially transport and social infrastructure, environmental issues and adaptation to climate change. The Resilience Strategy requires attention to biodiversity conservation areas in the context of climate change, especially in coastal areas¹³⁰. The strategic environmental assessment includes climate change and SLR scenarios and the provision of recommendations for land use, urban structure, policy mechanisms, and resources to minimize damage in case of major natural disasters or environmental change.

A similar emphasis is seen in Da Nang's Resilience Strategy, which focuses on the major challenges of urban resilience planning, and include four identified areas: i) keeping communities safe from storms and floods, ii) the stimulation of livelihood, development and job opportunities, iii) protection and water storage responses to climate change and iv) integration of information technology in response to natural disasters and climate change¹³¹. The strategy works together with the SEDS, Urban Development Planning, the Green Growth-led City Development Strategy and the Environmental City Plan.

In the Politburo's Resolution No. 43-NQ/TW (2019) on development of Da Nang City by 2030 with a vision towards 2045, the aim is to promote Da Nang city as a large urban, ecological and intelligent centre, as a hub of innovation and a seaside city attractive to live in the Asian region. The Decision on Approving the Task of Adjusting the General Planning of Da Nang City by 2030, with a Vision towards 2045, aims to assess the socio-economic situation of the city, by determining the current status of economic development in Da Nang via urban economic indicators and to determine the occupational structure, population and labour

ratio, population distribution, income, migration phenomena and urbanization issues.

Opportunities: The National Action Plan on Children and Da Nang City Action Plan on Children (CPA) for 2021-2025 are regarded as opportunities to support municipal leaders to place children and climate change in urban settings as a key priority. The process also offers opportunities to promote participation of children and young people as active agents of change¹³². Also, with Da Nang to become a hub of innovation as a climate resilient city, there are also opportunities to work closely with the private sector, to promote the use of technology (with regard to solar power or WASH technologies, for example) in child-centred climate change action.

There is also scope to strongly advocate for a climate change agenda with Da Nang authorities through the development of the city's SEDS, SEDP, sectoral plans and the new CPAC. The Situation Analysis of Children and Adolescents in Da Nang has already identified climate change as an emerging issue requiring Da Nang city to have a more innovative and holistic approach, especially encouraging the participation of children and adolescents.

4.4.3 Ninh Thuan province

Overview: Ninh Thuan province is known to have the lowest amount of rainfall in the country and is the most impacted by drought and water scarcity¹³³. The Department of Agriculture and Rural Development is assisting farmers in the province to plant drought-resistant crops and trees, a plan that aims to ensure better food security and income for farming households¹³⁴. The GoV issued Resolution No.115/NQ-CP (2018) on special policies and mechanisms supporting socio-economic development in Ninh Thuan province from 2018-2023. The resolution is regarding solar power projects in the province, where MPI is assigned to incorporate the Feed in Tariffs (FiT) extension as a special policy for Ninh Thuan province. This resolution is working towards mitigation strategies that are in line with promoting the use of more solar power in

schools, which UNICEF is supporting.

The province also has abundant sunshine and wind all year round, making it a suitable candidate for renewable energy, something the GoV is capitalizing on. Ninh Thuan province is currently home to 25 solar power projects. Under Ninh Thuan's Green Energy Plan, the province is expected to reach a total capacity of 1,500-1,800MW in wind energy and 3,912MW in solar energy by 2030. The estimated total registered capital is more than VND 50 trillion (US\$ 2.13 billion). With this surge in investment, there are opportunities to allocate more for environmental and socio-economic benefits for children¹³⁵. However, to tap this benefit, Ninh Thuan needs to facilitate private sector engagement to create healthy competition, which will attract more investment, therefore contributing more to provincial tax revenue.

UNICEF has supported Ninh Thuan to promote the child-centred approach to DRR during 2018-2019. As a result, Ninh Thuan has been able to integrate 10 indicators on CCA in DRR into Ninh Thuan's socio-economic development plan 2019-2020 as well as in sectoral annual plans on agriculture, health, education, social and labour issues. The project also provided training to teachers, officials and communities on skills in response to natural disasters, climate change events and to protect children.

Opportunities: With the 2016-2020 Green Growth Action Plan, Ninh Thuan is among very few pioneering provinces in Viet Nam that places climate change, environment, DRR and renewable energy at the heart of its socio-economic development. As a follow-up to the UNICEF-supported project on child-centred DRR and CCA, Ninh Thuan's 2021-2030 socio-economic development and sectoral plans are good opportunities to continue to address children's priorities, in general and in child-centred DRR, in particular. This will include the province-wide replication of good practices and models in safe communities and schools to strengthen community resilience in response to climate change and natural hazards.

The province aspires to continue upholding its commitment to ensuring the coherence of strategies on green growth, clean and renewable energy and DRR with socio-economic development objectives to achieve a balanced growth that leaves no one behind. More specific opportunities are outlined in Table 9, Appendix 2.

4.5. COVID-19 sensitive approach in the new normal

Despite the difficulties, the pandemic caused by COVID-19 has generated some opportunities:

The pandemic has helped governments and citizens everywhere realize, more than ever, the importance of building resilience. While the impacts of climate change are felt by many, and especially the most vulnerable, including children, the pandemic has only compounded those effects. Building resilience by improving access to and quality of social services can be strengthened in the context of social recovery from the pandemic and in the prevention and preparedness for the next pandemic. Efforts to build resilience will serve to reinforce strategies for adaptation to climate change. For example: i) good techniques have been developed during the pandemic to explore and apply innovative technologies and methodologies to communicate with others, to collect, manage and analyze data remotely and virtually, ii) the multi-sectoral approach and strengthened inter-ministerial coordination that was required to respond to COVID-19 can also be adopted to respond to climate change actions, iii) system strengthening to be climate risk-informed and climate resilient including in health, nutrition, WASH, education and child and social protection sectors and iv) with the pandemic there was an urgent need to strengthen sub-national capacities for effective and timely responses in situations where central officials were unable to travel to affected areas. These enhanced capacities will assist in responding to climate change.

5. CONCLUSIONS AND RECOMMENDATIONS



5.1. Conclusions

The outcomes of the CLAC reveal there is clearly a potential enabling environment in terms of a suitable legislative framework in place that, with some analysis, evidence and advocacy could generate the will and necessary resources to recognize and promote child rights in the context of their vulnerability to climate change impacts. However, there is work to be done and opportunities to seize in order for this enabling landscape in Viet Nam to demonstrate viable and workable achievements on children's issues.

The need for multi-sectoral partnerships is clear: the information collected during data collection for the CLAC, from the extensive desk review to the numerous interviews, revealed that partnerships are key to moving forward on child-centred climate change action. There are indeed some achievements on the climate change front, from many different organizations and sectors, from government to civil society to the private sector, from international to local and from health to participation. As outlined in Section 4 there are several opportunities available to take action and most of these involve collaboration with others across sectors and organizations.

For many of these suggested actions to be implemented, organizations need to examine their own *modus operandi* in terms of collaboration, to take down barriers to enable multi-agency and multi-sectoral collaboration, since the best way forward is to build synergies with other like-minded organizations and learn from those who are focussing on particular issues and using particular strategies that are effective. In addition, to provide more "evidenced-based advocacy"¹³⁶, coordination is needed among UN organizations such as UNDP, UNESCO, UN Women and UNICEF, as well as among GoV ministries, such as MOH and MONRE, that are actively collecting data that can contribute to policy frameworks.

Multiple gaps and opportunities have been identified with regards to GoV policy on climate change and the environment as well as policies relating to children (Section 3). Meanwhile, there is significant scope to act on these opportunities

(Section 4). The next steps are to determine priorities in terms of where collaboration will have the most influence with the resources available. While there are many opportunities, if choices had to be narrowed down, all indications are that developing a close partnership with key GoV ministries will result in influence on many fronts, including: i) working on the NDCs through the NDC partnership, ii) contributing to the National Task Force on climate change, iii) integrating child-centred climate change into the environmental components of the SDGs/SEDPs, iv) climate resilient development in the Mekong Delta region, v) social impact consultations, including vulnerability assessments, vi) incorporate climate resilient strategies in the NTP for New Rural Development for the next period to ensure access to clean water and improved sanitation in rural areas at provincial level, vii) integrate health care adaptive activities in NTPs and climate change projects and viii) guide local-level implementation of child-centred climate change activities and integrate children's issues into the Strategy on Green Growth for the period of 2021-2030 and integrate children's issues into the Strategy on Green Growth for the period of 2021-2030.

Investing in systems of essential services and incorporating climate change risks is critical to address the inequity and disparities of tomorrow and the future. The objective is to build a healthy, safe, resilient future – this includes, strengthening shock-responsive social protection and provision of social assistance to all, provision of primary health care at community level (including child and maternal health), providing WASH services and supplies to all households, health facilities and schools, continued education – especially on climate change and environmental, protection from violence and provision of psychosocial support and strengthening awareness of families. A crucial investment is in the deployment of professional personnel (teachers, health workers, social workers, caregivers, personnel of social protection centres, nursing homes, professional and trained clinical staff to provide mental health assessments and counselling services, especially at provincial and district levels).

5.2. Recommendations

This Climate Landscape Analysis for Children has painted a broad picture of the climate landscape in Viet Nam and which opportunities exist for this landscape to become an enabling environment for the integration of child-centred climate change issues and for Viet Nam to become a front runner in recognizing the needs of younger generations to ensure a sustainable future. Based on the overall analysis, broad recommendations are made here for reflection, further analysis, and perhaps planning and implementation. These can be regarded as key principles to apply across all the areas of engagement suggested in Section 4.

- **Multi-sectoral, multi-organization collaboration:** A “critical mass” should be established, made up of a well-coordinated inter-agency, multi-sectoral and multi-organization body, with a mechanism in place for enhanced communication and action. A high-level mechanism such as this, presided over by MPI and UNICEF, could take a leadership role in bringing together ideas, needs, experiences and resources, with the potential to generate synergies to advance climate change and environmental action in Viet Nam. GoV agencies in all sectors have a role to play, as do UN agencies, development partners, local and international NGOs, and the private sector. This coordinated body could work together to ensure GoV accountability, cross learning and promote action on diverse issues related to climate change, with expertise embedded in the various actors supporting and contributing to the combined effort. This could provide a forum for diverse expertise to develop guiding principles on children’s rights to a safe and clean environment and could contribute in a large way to provide practical guidance to policy-makers and implementers alike.
- **Generation and discovery of evidence to support policy advocacy, ensuring gender-disaggregated data on impacts:** Data on the relationship between climate change and children’s health, education, protection and overall well-being do exist, but there is a need to generate more and for this research to be presented as evidence to policy-makers. MOH, as one example, is an agency that requires support to implement its research ideas. Inter-agency initiatives should also be supported, such as that with MOH and MOET that monitors nutrition conditions, interventions and health care for children in areas most affected by climate change impacts such as urban areas (Da Nang and HCMC), Ninh Thuan, Mekong Delta, the northern mountainous, central coast and Central Highlands regions. Research on the losses of biodiversity and ecosystem services and impacts on children have not been adequately addressed and should be. Also the links between agricultural diversity, child nutrition and health require research. For example, by sector:

 - i) WASH: With lead roles performed by MOH and MARD, the WASH sector can conduct a risk assessment of climate change, to collect and analyze reliable data on hazards, exposure, vulnerability and capacity within the WASH sector. This would help key stakeholders in the sector to identify major risks in disaster-prone areas and determine the ways in which such risks can be addressed.
 - ii) Education: UNICEF and MOET can jointly prioritize work on promoting green habits, introducing climate-smart school standards/indicators, and developing sustainable environmental learning packages to limit the negative impacts of climate change and (air) pollution on education and learning. Such standards/indicators from the climate-smart school model will contribute to evidence for climate change action and children.



- iii) Health: More support given to MOH to conduct research on the impacts of climate change on children to support evidence-based policy formulation and contribute to scientific information globally. Support is also needed on capacity development for the National Action Plan on Climate Change to be implemented at sub-national levels.
 - iv) Food and nutrition security: There are few links made between the impacts of climate change on nutrition, agriculture and food security and how children are impacted. More support for research to highlight these critical links is needed in Viet Nam to provide more evidence for policy development that integrates the needs of children.
 - v) Inclusivity: The nexus of gender and children should be more thoroughly analyzed and presented as evidence-based advocacy on children's rights that distinguish between different degrees of vulnerability.
- **Capacity development:** There is an expressed need to develop capacity at several levels:
 - i. to generate, store and share data among GoV ministries;
 - ii. to train sub-national level departments on implementing climate change actions;
 - iii. on training teachers on climate change modules in the education curricula to adapt the free UN Conference Centre: Learn e-learning course on Children and Climate Change into Vietnamese for all teachers with the lead of MOET;
 - iv. to strengthen participation of women in the decision-making

process on water supplies, preparedness and resilience-related interventions for example. UNICEF, together with sectoral ministries/ departments, is in a position to support and assist in further training related to children's rights and climate change action.

- **Children's participation:** It is important to ensure that clear mechanisms and incentives are put in place so that children and adolescents have opportunities to provide feedback on their concerns/priorities and contribute ideas and innovation as agents of change in the area of climate change. Listening to what children and youth have to say about issues that severely affect them now and well into the future is critical if real change is to happen. The supporting legislation is there and the intention is in place. What is needed now is creative thinking, willingness to listen and openness to perspectives that might challenge the status quo.
- **Possible contribution of UNICEF:** Building on these results, UNICEF could further contribute to the efforts of government and partners in selected areas:
 - Place children at the heart of climate policies through generation of key evidence, including in sector plans and strategies. This includes the cost-benefit analysis for actions and inactions in CCA and mitigation as well as further in-depth research on the impacts of environmental pollution on children
 - Demonstrate effective interventions in policy-making and enforcement as well as community-based solutions and practices at sub-national levels (in diversified settings of vulnerabilities to climate and natural hazards such as the Mekong Delta region, Da Nang and/or Ninh Thuan)
 - Maximize partnerships with the GoV – such as with the MPI, MONRE, MARD-VDMA, MOET, MOH and MOLISA – to strengthen climate risk-informed and resilient policies and service delivery systems
 - Support policy implementation at sub-national levels through development of sub-laws, guidance, investment plans and demonstrating innovative community-based models, such as safe and clean community DRR models, climate-smart schools, health centres and WASH
 - Generate greater awareness of climate change, environmental degradation, pollution and biodiversity loss impacts on children among policy-makers, communities, families and children
 - Support child and adolescent-led innovative initiatives including in policy processes
 - Play a greater role in the implementation of global partnership frameworks in Viet Nam, including the NDC Partnership
 - Leverage and strengthen cooperation with key development partners, CSOs, private sector and regional bodies around common agendas, facilitating exchanges of expertise and good practices and mobilizing critical resources for Viet Nam.

APPENDIX 1. ASSESSMENT MATRIX OF VIET NAM'S LEGAL INSTRUMENTS FOR CLIMATE CHANGE AND HOW THESE ARE RESPONSIVE TO CHILDREN'S NEEDS

Viet Nam's national legal instruments that respond to the right of the child to a healthy environment	Categories to assess the responsiveness of Viet Nam's legal framework to children's right to a healthy environment
Constitution of Viet Nam	3, 5, 9, 12, 14, 16, 20
Law on Children	7, 9, 12, 13, 17
Law on Environmental Protection	1-6, 10-12, 22-23
Law on Water Resources	2, 11, 12
Law on Biodiversity/ National Action Plan on Biodiversity	5, 23/5, 14
Law on Education	10
Joint Programme by MONRE and MOET for Environmental Protection for the period 2019-2025 (2019)	11. 12
National Action Plan to for the Implementation of the 2030 Sustainable Development Agenda (2017)	3, 22
Implementation Plan of Paris Agreement of Viet Nam (PIPA) (2016)	3, 22, 23
SEDP of 2016-2020	2, 3, 7
National Green Growth Action Plan for 2014-2020	3, 22
National Greenhouse Gas (GHG) Inventory System	3, 22
Renewable Energy Development Strategy	3, 11, 22
National Plan of Action for children 2012–2020	14, 22
National Strategy on Environment Protection to 2020 with Visions to 2030	1, 2
Viet Nam Sustainable Development Strategy for 2011-2020	1, 2, 3, 4, 6, 10, 12
Law on Natural Disaster Prevention and Control	3, 7, 11, 12, 17

- 1 *Air pollution*
- 2 *Water pollution*
- 3 *Climate change*
- 4 *Chemicals, toxic substances and waste*
- 5 *Loss of biodiversity and access to nature*
- 6 *Mining*
- 7 *Children's rights to life, health and development*
- 8 *Children's rights to an adequate standard of living*
- 9 *Children's rights to play and recreation*
- 10 *Children's right to an environmental education*
- 11 *State obligation to collect, update and disseminate environmental information*
- 12 *Public access to environmental information*
- 13 *Children's rights to express views and have them considered*
- 14 *Participatory rights of children on environmental matters*
- 15 *Protection of children from reprisals for participating or expressing views on environmental matters*
- 16 *Effective remedies for children's rights violation*
- 17 *Non-discrimination in children's equal enjoyment of rights relating to a safe, clean, healthy and sustainable environment*
- 18 *State obligation to conduct a 'child-rights impact assessment' for environmental impact of proposed projects*
- 19 *State obligation to conduct a 'child-rights impact assessment' for environmental impact of proposed policies*
- 20 *Regulation of businesses (including State-owned) to protect children from environmental harm. (Includes obligation for businesses to conduct 'child rights due diligence' for actual and proposed actions on the rights of children through environmental harm)*
- 21 *Obligations on businesses to comply with the:*
 - (a) *Guiding Principles on Business and Human Rights;*
 - (b) *Children's Rights and Business Principles;*
 - (c) *Recommendations of the Committee on the Rights of the Child, general comment No. 16.*
- 22 *State obligation to adopt/ implement environmental standards consistent with the best available science and international health and safety standards or on the basis of the precautionary principle*
- 23 *State obligation to cooperate with other States to address global/transboundary harm*
- 24 *State obligation to provide access to court remedies for environmental harm by businesses in their State of incorporation as well as where the harm is alleged to occur*

APPENDIX 2. WHO IS DOING WHAT AND OPPORTUNITIES

Table 1. Key Opportunities for action under the SEDP and SDG

Opportunities for Action	Key Stakeholder	Role of Stakeholder
<p>Strengthen existing partnership on the integration of SDG to SEDP; ensure that the most vulnerable children are not left behind: in particular ethnic minority groups in remote areas, migrants and people with disabilities.</p> <p>Improve data on children's situation and needs</p>	MPI	<p>Oversees development of SEDP/ SEDS, SDGs</p> <p>GSO under MPI collect data on SDGs and statistics in Viet Nam</p>
<p>Consider the need to integrate the importance of biodiversity conservation and sustainable environmental management as key to a safe and clean environment and for ecosystem services fundamental to children's well-being</p>	MONRE	Oversees natural resource/ environment component of the SDG/SEDP
<p>UNICEF is in a position to continue to ensure child-related climate change indicators in the VSGD</p>	UNDP	Lead on the Development Partners Group (DPG) working group for VSDG
<p>Climate change response should incorporate children's vulnerability</p>	ADB	Supports climate change response in SEDP
<p>Become an active member of the CCWG and bring MPI-UNICEF's high-level networking to the group as well as forge new partnerships with civil society who are active in diverse child-related issues.</p>	CCWG	Support GoV in the development of climate change responsive SEDS/SEDP and sectoral action plans for CCA and mitigation which are inclusive of the poorest and most vulnerable

Table 2a Summary of key actions on NDC

Key stakeholders	Tasks
MONRE & UNDP	Greater action and involvement include a social assessment of the NDC which is currently in the draft stage
GIZ	leads the NDC Partnership and they are currently conducting a landscape assessment on projects for investments in line with the PIPA. UNICEF, in particular, could add value to this process through the integration of child-centred climate change issues in the project assessment; a process which would complement the CLAC. GIZ is also developing a “youth engagement plan” for the NDC so they can obtain feedback through a youth-led consultation process. This participatory process is an opportunity for youth to provide input on climate change and environmental issues that affect them.
SNV	Conducting a gender sensitive/climate framework for mainstreaming the NDC into provincial planning processes. This is another process where UNICEF could be involved to integrate children’s environmental rights into the NDC provincial planning process, specifically for Ninh Thuan province as a part of UNICEF’s risk-informed sub national planning.
Climate Change Working Group (CCWG) in Viet Nam	Established in 2008, brings together INGOs, local NGOs, development partners, institutions, professionals and other interested parties to exchange ideas and to discuss 'lessons learned and best practices' on how to improve their work on climate change. The network’s mission is to assist vulnerable groups in Viet Nam to the impacts of climate change by advocating for environmentally and economically sustainable as well as socially just responses. The network currently has over 100 NGOs as members and about 1,300 individual subscribers to the CCWG mailing list. For the period 2019-2023 the overall objective of CCWG is to 'Promote inclusive climate action to support Viet Nam in achieving the goals of the Paris Agreement'. CCWG functions under the auspices of the VUFO-NGO Resource Centre. The current chair of the network is WWF-Viet Nam.

Table 2b Key opportunities for input into NDC and NAP

Opportunity for Action	Key Stakeholder	Role of Stakeholder
<p>International NDC Workshop – postponed: possible opportunity to participate when new date is announced</p> <p>UNICEF to become active member of the NDC Partnership and contribute to PIPA tasks (refer to section 4,2)</p>	MONRE	<p>NDC Partnership focal point</p> <p>Conducting social assessment of NDC with GIZ</p>
Continue partnership with MPI and advocate together for child-centred action and child participation on climate change actions in specific PIPA tasks and finance	MPI	<p>NDC Focal Point</p> <p>Focal point for the GCF and climate investment finance from state budget;</p>
Collaborate on the landscape assessment for investment projects to integrate child-sensitive issues and awareness into NDC via PIPA	GIZ	Leads the NDC Partnership; conducting a landscape assessment of projects for investment; leading a youth consultation process for NDC
Collaborate on the social assessment to integrate child-sensitive indicators of climate change impacts	UNDP	<p>conducting social assessment of NDC;</p> <p>supports the NAP development through a GCF grant</p>
<p>Gender-based training could be complimented with training on the integration of child-based training, using similar frameworks and procedures.</p> <p>The climate and development fund work may compliment the CLAC; Connections should be made with the in-country contacts.</p>	SNV	<p>Provides co-finance to the NDCP to support the development of a gender-based climate framework to mainstream with the NDC integration in provincial planning; conducting provincial level gender trainings.</p> <p>NDC Climate and Development Fund (SNV and WWF): conducting a climate landscape analysis on projects for investments in line with the PIPA</p>
Examine how climate change has been integrated sectorally and identify areas for children's issues	World Bank	Assists with climate change in sector plans
MPI-UNICEF could collaborate and/or become active members of the working group or act as advisors on child-related climate change issues including child participation.	CCWG	The consortium of civil society and development partners have input to the NDCs through consultations

Table 3a- Selection of Tasks in the PIPA and requested support for implementation

Task No.	Task Priority	Party Responsible	Task Description	Request for support
19	Priority Task	MONRE, MARD, MOF, ministries, sectors, localities, insurance agencies	Review available information and data on adaptation and loss and damage; Propose additional information, research and management and sharing of data to facilitate the development and update of reports on the national contribution to CCA.	Bring together existing data on climate change effects, past losses and damages, risks, vulnerabilities and exposures to the effects of climate change, organizing data in georeferenced electronic databases, and making them widely accessible Additional in-depth research on adaptation needs and Loss & Damage from climate change in Viet Nam
20	Compulsory Task	MONRE, MARD, MOH, MOLISA, MOF, MPS, VAST, insurance agencies	Assess risks and vulnerability to climate change, determine adaptation needs and needs to resolve loss and damage (L&D) issues.	In-depth analysis on possible mechanisms to reduce and transfer risks, and reduce losses and damages from climate change in Viet Nam
40	Priority Task	MOET, research institutes, schools	Develop and implement curricula to educate and update knowledge on climate change, in line with the Paris Agreement's requirements on the education and training system within the country.	Earlier support to climate change curriculum development at different levels has been small. Curricula also require updating in light of new scientific findings, technological developments and (global) climate policy developments
41	Priority Task	MoIC, MONRE, ministries, sectors, localities	Advocate and raise awareness on the Paris Agreement in Viet Nam.	There is and has been public communication on specific climate change aspects and especially disaster risk reduction, targeting specific groups. But there are no large scale, organized campaigns, e.g. with the media and experts, schools and unions regarding the Paris Agreement or more generally about climate change policies and actions.

Table 3.b Examples of Projects that contribute to the NDC PIPA. (from: Viet Nam mapping exercise by development partners, updated Dec 18, 2019, GIZ)

No.	Project Name	Implementation organization/ Partners	Description of Project	Year of implementation
751	Coastal Cities Sustainable Environment	WB-funded (P156143) (No executing or implementing agency listed)	The Project development objective is to increase access to sanitation services and improve the operational performance of sanitation utilities in the Project Cities.”	pre/post 2020
768	Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods (ICRSL) Project,	WB with GEF (P159976). No exec or impl agency listed.	The project development objectives are to enhance tools for climate-smart planning and improve climate resilience of land and water management practices in selected provinces of the Mekong Delta in Viet Nam.	
	pre/post 2020			
834	World Bank City Resilience Program (global project).	Implemented by WB, funded by Switzerland.	Support city governments in improving their social, physical and financial resilience to adverse climate change events through assessments and diagnostics in policy, infrastructure and finance. The programme will enhance the enabling environment and lay the basis for cities to make strategic investment decisions towards building greater resilience.	pre/post 2020
877	Urban Climate Change Resilience	implemented and funded by ADB.	The project will support to make urban infrastructure greener and more climate- and disaster-resilient in secondary cities such as water supply, green parks, rural roads, drainage system. The project will integrate solutions for climate change mitigation and adaptation at city level.	Post 2020 (2021 or 2022)

Table 4. Key Opportunities for Input into the Green Growth Strategy and Energy Sector

Opportunities for Action	Key Stakeholder	Role of Stakeholder
MPI-UNICEF to continue partnership for the integration of child-sensitive issues into national and provincial green growth strategies	MPI	Focal Point for Green Growth Focal point for the GCF
Input on social impact during provincial level consultations would advance the needs of children	MONRE	Permanent agency for the NCCC and co-implements the Target programme on climate change and green growth together with MPI: MONRE leads the climate change activities and MPI leads the green growth activities. Combines provincial reports on climate change preparedness
Collaboration to include MOLISA and GIZ for policy analysis on climate change for content of policies UNICEF could help to identify gaps for child-centred approach and integrate the approach into MoLISA's GG strategy	MoLISA and GIZ	Integrating green perspectives in the next period of GG Strategy (collaboration between GIZ and MOLISA) GIZ and MoLISA: "Social Dimension of Sustainable Green Growth in Viet Nam" (2016-2022) Implementing a Social Impact Assessment (SIA) within the Policy Impact Assessment (PIA) and the Strategic Environmental Impact Assessment (SEA): integrating social aspects in sectors such as energy, biodiversity and natural resource management, and vocational training
Collaborate with MOIT on activities on energy saving and children, especially in schools – "climate-smart schools", which would require collaboration with MOET	MOIT	MOIT is in charge of energy sector development in Viet Nam. MOIT implemented the energy saving and efficient use target programme and leads the development of the master plan on energy and power
Participate in this Alliance to integrate children's issues and encourage child participation in energy issues	GreenID	Leads the Viet Nam Sustainable Energy Alliance

Table 5. Key Opportunities for Sectoral Contributions for Child and Social Protection

Sector	Opportunities for Action	Key Stakeholder	Role of Stakeholder
WASH	Continued support for MARD, MOH and MOC in the development and implementation of the climate resilient strategy including: i) research on applied technologies for water treatment for areas that are vulnerable to saltwater intrusion (both big and small-scale schemes); ii) advocacy and promotion of water safety plan, household water storage, rain water harvesting systems, sanitation and hygiene for all.	MARD	Responsible for the NTP for New Rural development which covers nutrition interventions for stunting, clean water and rural environmental sanitation.
	Possible collaboration	SNV	Bring on-the-ground local presence and know-how in terms of bringing in private sector partners. SNV Head office keen to expand collaboration with UNICEF Currently lack funding so cannot continue WASH programme
	Possible collaboration	Save the Children	Work on WASH in the Mekong Delta
	Possible funding opportunities to support WASH	Private Sector	Clean water treatments
Health	Support needed to develop capacity at the provincial level to implement the Action plan on CC Air pollution not mentioned in the health sector action plan for climate change – an opportunity to advocate for this due to the well documented critical impacts on children	MOH/VIHEMA	MOH is also to conduct research on the links of current child malnutrition to CC Developed a Health Sector Action Plan (HSAP) for Climate Change: children mentioned once as a vulnerable group Provide conclusive data that prove the links between climate change and some diseases (dengue, diarrhea, HFMD):
	WB support to HSAP is not specific to children, so support could be provided specific to children's health in the most vulnerable areas such as Mekong delta or on issues such as the impacts of air pollution on child health. Investigate the possibility of UNICEF being an implementing partner for the HSAP and contributing to financing its implementation	World Bank	Supports MOH on HSAP
	Possible collaboration in sub-national initiatives (urban focus)	ADB	Supports health sector: guidelines for investments: urban and infrastructure focus

Sector	Opportunities for Action	Key Stakeholder	Role of Stakeholder
Education	<p>Ensure that climate change education is implemented in sectoral plans; support MOET in acquisition of financial resources for curriculum and teacher training in climate change-related subjects</p> <p>Ensure that CCA is integrated into the curriculum as effectively as DRR has been and that the differences are understood</p> <p>Possible support for data collection for evidence-based policy development</p>	MOET/DSTE	<p>Working with partners for climate change curriculum, teacher training</p> <p>DSTE is developing the 10-year education sector plan</p> <p>Incorporates education in sustainable and climate-resilient development of the Mekong Delta into education programmes</p>
	Potential to collaborate (also with MOET) on developing indicators of child nutrition and methods for data collection in schools and to learn from the outcomes of the study to apply elsewhere	MOH	MOH is to work with MOET to track and monitor nutrition conditions, nutrition interventions and health care for children and students in areas affected by climate change
	Ensure that climate change is a part of the environmental education strategy	UNESCO	Developing a 10-year strategy for environmental education
	Work with EU-supported CSOs on Renewable Energy and Energy Efficiency project, led by Green ID and Da Nang Solar Energy Development (DSED) project in schools	EU	Civil society conducting Renewable Energy and Energy Efficiency project, led by Green ID and Da Nang Solar Energy Development (DSED) project
	there is a need to engage the private sector for possible funding opportunities (refer to case study)	Private Sector	Solar supply to schools
	Sharing learning between similar interventions	GreenID	Use the Green School Model and Green Children's Forum
	Sharing learning on integrating climate change and CCA concepts into curricula	Live & Learn	Invited by MOET to integrate environmental education into curriculum; 50:50 energy savings in schools; Children's Forum

Sector	Opportunities for Action	Key Stakeholder	Role of Stakeholder
DRR	<p>Build on previous successful work/ partnership on CCDRR: now needs more focus on CCA</p> <ul style="list-style-type: none"> - strengthen the system to focus on children, CWD and mainstream gender - Support the implementation of the National Strategy on DRR and Sendai framework - strengthen data system for risk vulnerability and analysis - support law on NDPC and sub-laws 	MARD/VDMA	
	UNICEF has added value with experience in risk informed planning; apply to school-based CCA assessments	JICA	DRR work based on Sendai framework, risk-informed local plans, community and school-based DRR
Child and Social Protection	<p>Ensure data system strengthened for child risk and vulnerability mapping and analysis for planning and risk reduction efforts</p> <p>Safe Water for children</p>	MARD/VDMA	VDMA and Water Resource Directorate
	<p>Contributions can be made during revision period: where impacts of climate change on children can be inserted.</p> <p>Collaboration with MOLISA could bring children's issues to the NDC and NAP, noting the challenge of including children in the constrained national financing so leverage (collaboration) is important.</p>	MOLISA	<p>Law on Children: Currently, only the issues of children affected by natural disasters and air pollution mentioned</p> <p>National Strategy on Children 2021-2030 and National Programme on Child Protection (end of 2020)</p>
	Build on the study on Shock-Responsive Social Protection (SRSP) System in Viet Nam with a focus on Children, and support policy design and implementation of the ASEAN Framework on SRSP	FAO	Early action and shock-responsive social protection
	Gender integration has been pervasive: apply approach and principles that have been so successful for gender to integration of children's issues	UN Women	Integrate gender into SRSP

Table 6. Key Opportunities for Environment and Natural Resources

Opportunities for Action	Key Stakeholder	Role of Stakeholder
<p>The linkages between climate change and environmental degradation need to be better highlighted so advocacy on both issues can be integrated</p> <p>Support is needed in the process of developing one system of data collection for a data portal</p>	MONRE	Conducts Provincial level consultations for social impact
<p>ChangeVN would like UNICEF and other organizations to promote their video; Currently, they partner with the UNICEF HCMC office</p> <p>Linking with the Clean Energy Alliance in Ha Noi will generate more information and advocacy opportunities</p>	ChangeVN	Focus on Air Pollution and reach policy makers through media
Support and scale up the good initiative by Live & Learn	Live & Learn	Working on Air pollution issues in Ha Noi
Involvement in the National Action Partnership (both UNDP and UNESCO are involved) as a part of the World Economic Forum (WEF) will provide opportunities for input	YCCAN	Focus on air quality in HCMC and youth empowerment
Support and scale up the good initiative by GreenID	GreenID	Provide comments on Air pollution in the revised law on environmental protection.
Ensure that the benefits of biodiversity for children are part of WWF advocacy to conserve biodiversity	WWF	Involved in protected area and species conservation in Viet Nam

Table 7. Key Opportunities for Child Participation

Opportunities for Action	Key Stakeholder	Role of Stakeholder
Work with involved CSOs to conduct participatory vulnerability assessments that ensure that children are targeted	MONRE	Working with CSO to conduct vulnerability assessments
UNICEF has the experience to support and advocate for child participation within the education sector	MOET	Children regarded as agents of change: peer to peer communication; child to parent education
Partner with MOLISA to create a high-level mechanism (overarching committee) to coordinate work with and for children across sectors on CC. Create an enabling environment to enact child-friendly policies. Consider platforms for children's participation to work with this high-level mechanism	MOLISA	Their role is to work on children's issues
Share leaning and collaborate to create a critical mass for increased impact	Save the Children	Work on Global campaign is "Raise the voice" in communities in 19 countries; they are planning a campaign in 2020 in VN with children from central and the north
Collaboration with other involved INGOs will help with advocacy and generate greater awareness among children and their parents of the importance of participation	Plan International	Work on a campaign of encouraging children to be change agents and learn about climate change to teach their parents, peers as well as GoV agencies
Learn from the outcomes of the youth engagement plan and apply to other child/youth led consultations	GIZ	Conducting a "youth engagement plan" for feedback through a youth-led consultation process
Share learnings and provide support	Live & Learn	Environmental education – and raising the voice of children
Learn more and assist with broadening the campaign that includes children as advocates	ChangeVN	Conducted Air pollution campaign with the participation of children.

Table 8. Key opportunities for advocacy and awareness raising

Opportunities for Action	Key Stakeholder	Role of Stakeholder
Integrate child-related issues into awareness raising activities on CCA and sustainable development	MARD	Carry out communication activities to raise the awareness among people in the Mekong Delta of opportunities from the process of transformation to sustainable and climate-resilient development.
	MOLISA	Conducts awareness raising on CCA for policy makers and law-makers in order to enable mainstream the CCA in Law and policies
Social and Behaviour Change Communication (SBCC) used for advocacy on children's issues and rights in climate change strategies	ChangeVN	Good experiences on advocacy, campaigns, and the role of communication for behavior change
UNICEF should look into becoming involved with the WG and the diversity of organizations and what they bring to the group.	CCWG	Large consortias of CSO and development partners;
Inputs into the NAP		

Table 9. Key opportunities for sub-national work

Opportunities for Action	Key Stakeholder	Role of Stakeholder
Mekong Delta region		
<p>Opportunities for child-centred vulnerability assessments, child-sensitive indicators to be developed for the Mekong Delta region.</p> <p>There are opportunities for engagement across sectors with a stronger focus on climate change and risk reduction and safe water for children.</p> <p>Support MONRE to ensure protection and conservation of mangrove forests and advocate for no areas set aside for no cutting for any purpose</p>	MONRE	<p>Presiding authority over the action to “Formulate a mechanism for cooperation in and supervision of implementation of the Resolution No. 120/NQ-CP on sustainable and climate-resilient development of the Mekong Delta”</p> <p>Oversee conservation of mangrove forests and to ensure they are not converted for other purposes (*except for special socio-economic development projects decided by the competent authority)</p>
<p>Opportunity to work on provincial plan of action for CCA and sectoral plans at sub-national level on child-centred plans in health, education and child protection</p> <p>SEDP, sectoral planning across sectors of UNICEF’s mandate with stronger focus on climate change and risk reduction and safe water for children</p>	MPI	<p>The presiding authority over the plan to formulate and organize the implementation of the comprehensive planning for sustainable and climate-resilient development of the Mekong Delta by 2030 with a vision toward 2050 by incorporating approved sectoral and local development plans in accordance with regulations of the Law on Planning. MPI has a role in investment and fund mobilization.</p>
<p>System-wide strengthening on risk reduction for children and with children</p> <p>Whole programme on resilience building at community level</p> <p>Address root causes of drought and saltwater intrusion to see what might be exacerbating climate change impacts</p>	MARD	<p>MARD is to carry out communication activities to raise Mekong Delta people’s awareness of opportunities from the process of model transformation with a view to sustainable and climate-resilient development.</p> <p>VDMA is actively working with CSO on drought and saltwater intrusion in the Mekong</p>
<p>UNICEF was not present in the initial stages of the HSAP development: there is nothing specific in the plan or no indicators that addresses children’s vulnerability. UNICEF and other relevant ministries should be involved in implementation stage</p> <p>VIHEMA needs high-level support to i) coordinate ministries (especially MOC and MARD) and ii) manage budget allocations</p> <p>There is an opportunity to develop a health network to meet the requirements of disease prevention and new diseases due to climate change impacts</p> <p>MOH should be supported in health and WASH activities specifically concerning children’s needs in the Mekong</p>	MOH	<p>HSAP objectives focus on the Mekong delta (to develop a health network to meet the requirements of disease prevention and new diseases that may arise due to climate change impacts, focusing on Mekong Delta region)</p> <p>MOH works on safe water and diarrhoea in the Mekong delta (Goal #6 in the HSAP). Involves ministries of MoC, MARD, MONRE and MOH</p> <p>MOH oversees the review of the health facility network planning in the Mekong to ensure that investments in the health system can serve demand; also to improve hygiene conditions and control drinking and domestic water quality in the context of climate change</p>

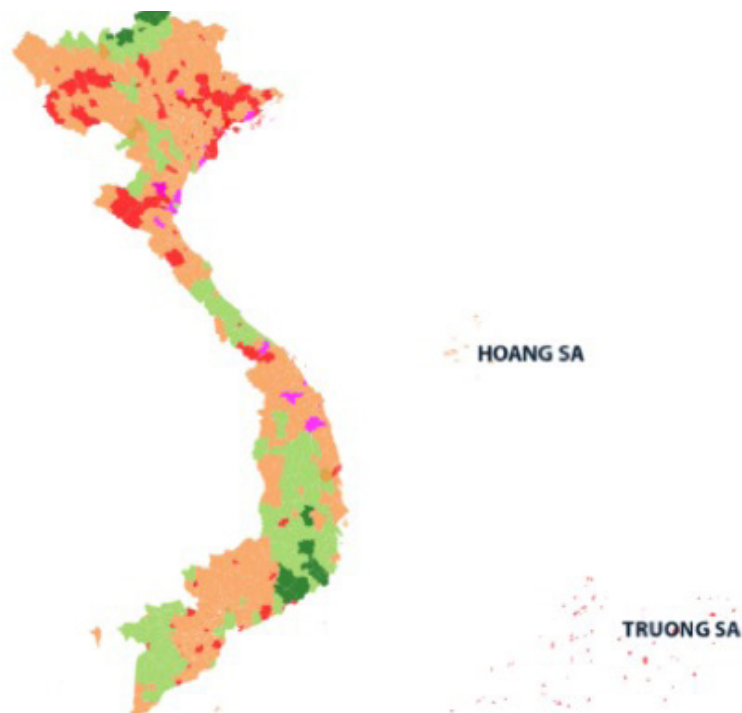
Opportunities for Action	Key Stakeholder	Role of Stakeholder
Opportunities for climate-smart schools and curriculum development to include climate change	MOET	Promote education in sustainable and climate-resilient development of the Mekong Delta
CBNRM ²⁶ provides opportunities for vulnerability assessments, and child/youth participation in CC-related issues	ADB	Work on drought & flood mitigation integrated with community based natural resource management – not child-centred
Opportunities for collaboration and possible funding proposals	EU	Working on multiple issue in the Mekong Delta region
Opportunities for collaboration; sharing learning	GIZ	Regional coordination of climate-resilient development in the Mekong Delta
CCA provides opportunities for vulnerability assessments, and child/youth participation in CC-related issues	Save the Children	Work on community CCA and WASH in the Mekong and how to raise the voice of children in communities
Consider implementation of climate resilient WASH strategy as eligible for GCF funds Participatory vulnerability assessments are an opportunity to integrate assessments of climate change impacts on children	SNV	Previously had WASH programme in the Mekong Delta – they would like to partner with UNICEF to continue this work
Opportunities to work with an INGO very experienced in environmental issues which will help to strengthen the evidence base for impacts of climate change and environmental degradation on children	WWF	Work in the Mekong delta region: on loss of ecosystem services due to saltwater intrusion, SLR and increased rainfall
Ninh Thuan Province		
Possible to find opportunities to work together with gender workshops to incorporate child-related issues also linked to the NDCP work	SNV	Conducts gender training at provincial level levels for NDCP integration
Continue to support the local authorities on mainstreaming CCA in local green growth and climate change 5-year plan, smart urban, and five year SEDP and annual plan	Ninh Thuan's Local authorities	Implements projects supported by UNICEF on DRR. Up to now, 10 CCA indicators have been integrated into socio economic planning in 2019, 2020 and annual sectoral plans of agriculture, health, education, and social and labour affairs
Da Nang City		
ADB will link MPI-UNICEF with a colleague for their new HCMC project for potential collaboration	ADB	Green City Investments Supports policy development with MONRE on the Green City Strategy in HCMC

Appendix 3. List of people interviewed for the CLAC

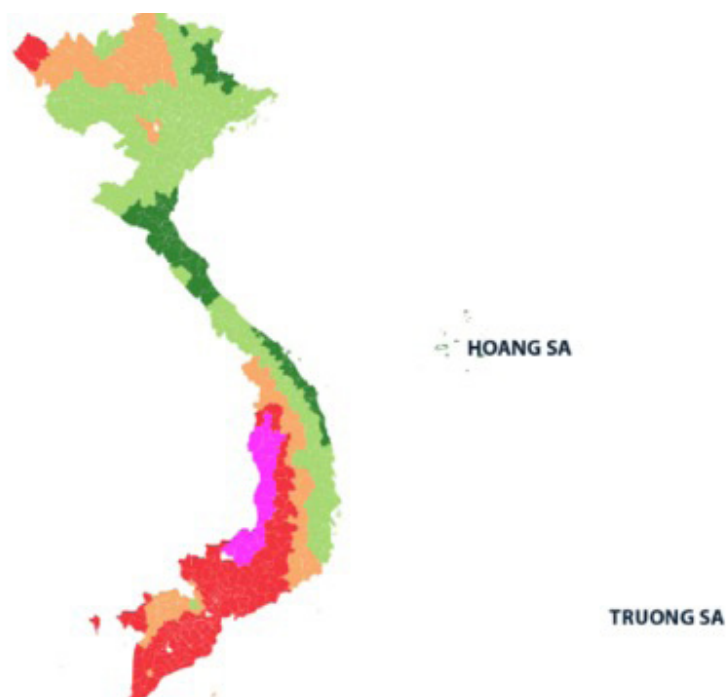
No.	Name	Affiliation
GoV partners		
1.	Chu Thanh Huong	IMHEN, MONRE
2.	Dr. Nguyen Trung Thang	ISPONRE, MONRE
3.	Nguyen Thi Dung	Department of Science, Technology and Environment, MOET
4.	Do Manh Cuong	VIHEMA, MOH
5.	Do Thi Thu Huyen	MOLISA
6.	Nguyen Xuan Hong	MARD
7.	Tran Thi Luyen	Department of Planning and Investment, Ninh Thuan
8.	Mr. Nguyen Tuan Anh	Deputy Director General, Department of Science, Education, Natural Resources and Environment, MPI
9.	Ms. Nguyen Thanh Nga	Expert, Department of Science, Education, Natural Resources and Environment, MPI
UN Agencies, Development partners and CSOs		
1.	Toshiyuki Matsumoto	UNESCO
2.	Tran Thi Thuy Anh	UN Women
3.	Bui Viet Hien	UNDP
4.	Nguyen Thai Anh	FAO
5.	Justyna Grosjean	Greening MOLISA project, GIZ
6.	Ha Huong	Greening MOLISA project, GIZ
7.	Cecile Leroy	EU
8.	Nguyen Thi Le Thu	World Bank
9.	Yasuhiro Kasuya	JICA
10.	Pham Quang Phuc	ADB
11.	Le Van Duong	World Vision
12.	To Thi Minh Trang	Plan International

No.	Name	Affiliation
13.	Chu Hoang Thanh	Save the Children
14.	Hang Le	Nui tuong
15.	Hoang Minh Hong	Change VN
16.	Do Van Nguyet	Live & Learn
17.	Trinh Thi Ha	YCCA Network
18.	Nguy Thi Khanh, Cao Van Ha	GreenID
19.	Richard Rastall	SNV Viet Nam
20.	Alison Rusinow	SNV Viet Nam
21.	Do Huu Nhat Quang	GreenViet Consultancy Company Ltd
22.	Kanwarpreet	IKEA Services Viet Nam Co. Ltd
UNICEF		
1.	Simone Vis	UNICEF, Education
2.	Ho Tran Thanh Huyen	UNICEF, Education
3.	Nguyen Huy Du	UNICEF, CSD/WASH
4.	Nguyen Thi Y Duyen	UNICEF, Child Protection
5.	Marianne Oehlers	UNICEF, Partnerships Office, HCMC
6.	Ly Phat Viet Linh	UNICEF, Social Policy and Governance
7.	Nguyen Thi Thanh An	UNICEF, Social Policy and Governance
8.	Jihee Kim	UNICEF, Social Policy and Governance
9.	Mizuho Okimoto-Kaewtathip	UNICEF, Social Policy and Governance

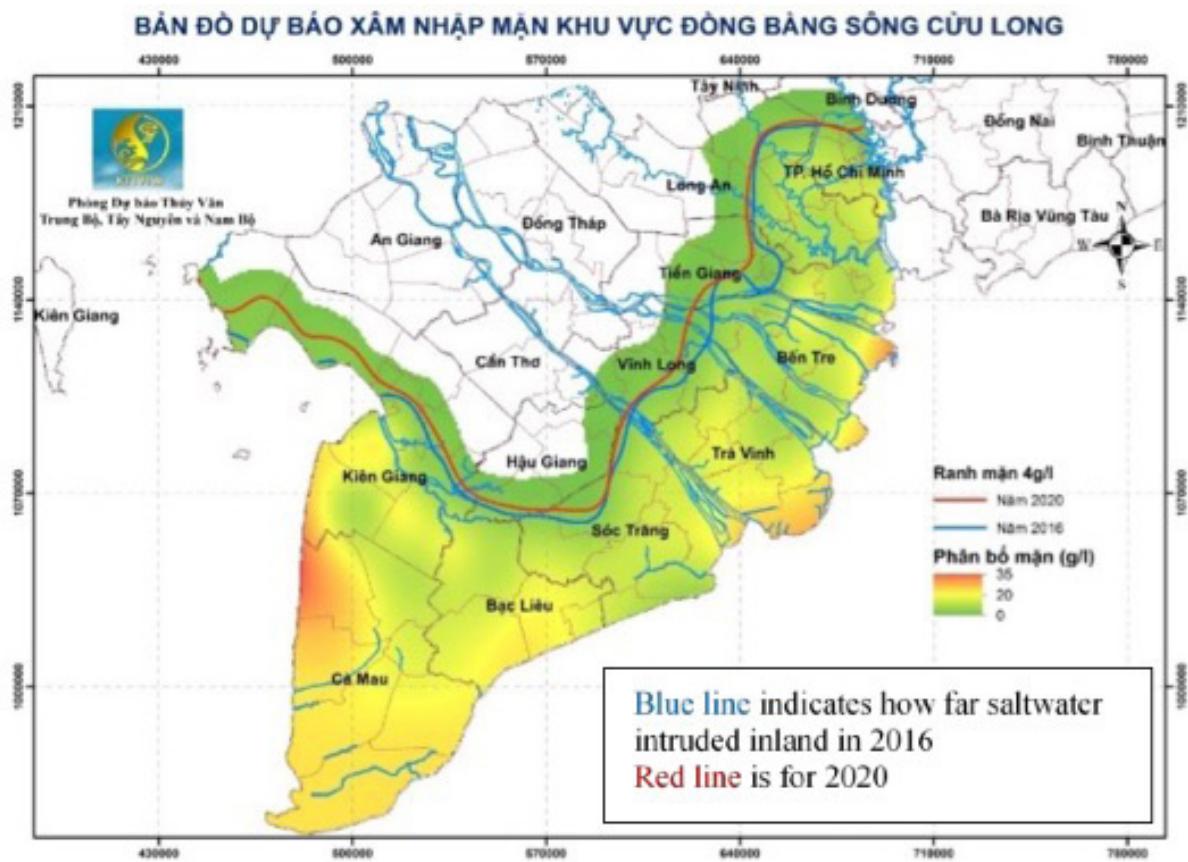
Appendix 4. Graphic representation of climate trends in Viet Nam



Mean projected change in rainfall 2050 (pink=22-32mm; red = 15-22mm; peach= 7-15mm; light green = 0-7 mm; dark green = less than 0mm (source: Viet Nam's Climate Risk Index (UNDP) <http://eng.climaterisk.org.vn/>)



Drought susceptibility averaged over the year (1985-2015) (red is high, pink is very high, peach is medium, light green is low, dark green is very low) (source: Viet Nam's Climate Risk Index (UNDP) <http://eng.climaterisk.org.vn/>)



Map of the Mekong delta affected by saltwater intrusion in 2016 and predicted for 2020.

Appendix 5. Work Plan for Climate Landscape Analysis for Children: MPI and UNICEF

Background and problem statement

Viet Nam is ranked ninth in the world for vulnerability to the impacts of hazards related to climate change (ToR). This high vulnerability is by virtue of its long coastline and the potential for SLRs; the dependence of smallholder agriculture and its dependence on a predictable temperature and rainfall regime; and also due to the presence of cyclonic activity and related extreme weather systems in the region. Children are considered vulnerable to the impacts of climate change because of they are at greater risk of malnutrition, disease, missed educational opportunities, among other impacts. A need has been identified to improve the understanding of how climate change impacts children in Viet Nam and how GoV policy and regulations can effectively address these impacts.

The GoV is embarking on the development of Socio-economic Development Strategy 2021-2030, Socio-Economic Development Plans 2021-2025 at the national, sectoral and sub-national levels. These plans provide the opportunity to consider and to integrate recommendations on the impacts of climate change on children,

Goal of the CLAC

The Ministry of Planning and Investment (MPI) and UNICEF Viet Nam have agreed to partner in order to undertake a Climate Landscape Analysis for Children (CLAC) with the goal to:

With a better understanding of the policy environment and overall landscape on the issue of children and climate change, Viet Nam can strengthen its future climate policies, plans and programmes to prioritize the needs of children as current and future generation.

Objectives of the CLAC

There are two broad objectives of the CLAC that include both an external and internal analysis:

1. **External:** To support the GoV, particularly the MPI, to identify opportunities to:
 - i. Promote child-centered approaches to climate change in Viet Nam at national, sectoral and sub-national levels including the Socio-Economic Development Plan, Green Growth Strategy, National Action Plan and Nationally Determined Contribution on Climate Change, sectoral policies and City Action Plans;
 - ii. Strengthen partnerships on children and climate change across sectors, at sub-national levels and with different partners (including CSOs and the private sector); and
 - iii. Identify potential areas for further research.



Generate an overview of current issues, initiatives and gaps in children and climate change, aiming to inform future programming of UNICEF Viet Nam.

2. **Internal:** To determine and provide recommendations on how the work on climate change, energy and the environment (CEE) and children can be strengthened and further incorporated into the new UNICEF Viet Nam country programme 2022-2026

This objective takes into consideration the following:

- i. Alignment/positioning of UNICEF programme with the GoV's Socio-economic Development Strategy, Socio-economic Development Plans, Nationally Determined Contribution and other GoV policies related to climate change action
- ii. Alignment/positioning of UNICEF's child-centered climate change strategy with the green growth strategy along with other sectoral strategies that include children's welfare (health, DRM, education)
- iii. Analysis of potential partners for programme and resource mobilization in order to prioritize the inclusion of children's needs in climate change action.

Methodology

The analysis will be comprised of both an external and an internal component in order to provide a whole picture of the issue. The analysis will review GoV policies and relevant programmes in Viet Nam and discuss issues with stakeholders. The CLAC will be designed to support advocacy and identify areas for further research to promote child-centered approaches to climate change in Viet Nam. The study will also examine available data on different sectors (health, education, DRM, water and sanitation) and cross cutting issues including gender, urbanization and migration and communication/ awareness raising strategies to determine how children are impacted and to inform how policy can be more inclusive of children's needs.

The study will use desk review as the key method to collect and analyse secondary data, which will be supplemented with a number of individual

interviews and consultation workshops with key stakeholders at national level.

Data collection will take place primarily in two ways:

1. **Desk Review:** secondary data sources include GoV policy and action documents, GoV data sources, UNICEF strategy documents, and other sources as identified by UNICEF and MPI.

2. **Semi structured Interviews.** These interviews will be conducted with stakeholders including UNICEF staff, GoV staff, selected organizations and others. The interviews will be based on a set of guiding questions and will also provide an opportunity for other issues to be discussed as they arise. Note that most of the interviews conducted were conducted virtually due to the COVID-19 pandemic (see the following page titled *Potential Limitations to CLAC Study*).

Detailed Work plan

No	Key Tasks	Action Required	Deliverables	Time Line and number of days	Person(s) responsible
1	Develop a detailed work plan for the assignment	Collaboration to develop operational work plan	Detailed work plan submitted agreed on by UNICEF and MPI	Jan 11-15 <i>(1 day off site Ellen)</i>	Ellen and Hoai. Reviewed by UNICEF
2	Review of Work Plan	Work plan submitted to UNICEF and MPI	<i>Review and feedback provided</i>	Jan 16-17	UNICEF and MPI
3	Conduct literature review for the CLAC in a thorough review of guidance documents, data sets	Obtain required policy documents (global and regional guidance and literature in Viet Nam, UNICEF Viet Nam CPD 2017-2021 as well as MTR Strategy Note on Children and CC). Obtain sectoral data where possible related to children's health, education, water, agriculture.	Analytical literature review with a preliminary analysis of data and evidence with preliminary information and knowledge gaps identified	Jan 16-Feb 7 <i>(6 days off-site Ellen; 4 days Hoai)</i>	Ellen will focus on internal review documents; Ellen and Hoai will examine government policy for external review; Hoai will access relevant and available government policy and data.
4	Stakeholder analysis and mapping in the field of climate change in Viet Nam, with a stronger focus on high-potential partners (programme and resource) who address children's and those with interest in working with or/ and for children in climate change interventions and communities' issues related to climate change priorities and strategies, with those directly addressing children's issues highlighted separately	Ellen and Hoai to connect remotely to develop and finalize stakeholder list	Stakeholder list finalized, interview schedule proposed and stakeholders contacted with proposed dates	Feb 10-11 <i>(2 days off-site Ellen; 2 days Hoai)</i>	Ellen and Hoai to finalize stakeholder list; Hoai to work with MPI/ DESENRE and UNICEF to send out interview requests on proposed dates and follow up on meeting arrangements
5	Logistics for travel (flight and visa)	<i>Travel dates finalized; UNICEF to assist with visa requirements (letter of invitation)</i>	<i>Travel arrangements finalized and visa obtained</i>	Jan 24-28	Ellen

No	Key Tasks	Action Required	Deliverables	Time Line and number of days	Person(s) responsible
6	Design methods for data collection on site (stakeholder interviews and focus groups).	The preliminary analysis from Task 3 (literature review) will inform the interview questions	Data collection tools determined – interview question guides designed	Feb 12-14 <i>(3 days off-site Ellen; 1 day Hoai)</i>	Ellen and Hoai will draft stakeholder interview questions
7	Debrief with MPI and UNICEF: Review of refined methodology and literature review preliminary findings by UNICEF and MPI	<i>MPI and UNICEF to provide feedback on literature review and data collection tools</i>	<i>Feedback on literature review findings and on question guide provided</i>	Feb 17-21	<i>UNICEF and MPI</i>
8	Based on literature review analyse all ongoing programmes on climate change in Viet Nam and strategic opportunities for the Government and UNICEF Viet Nam in programming on child-centred climate change action.	Finalize data analysis on secondary data collection	Analysis of ongoing programmes on climate change in Viet Nam with highlighted strategic opportunities for children and communities and climate change programmes	Feb 24-27 <i>(4 days off-site Ellen; 4 days Hoai)</i>	Ellen and Hoai
9	Based on available data sets , analyse data and evidence regarding children and the climate, energy and environment issues affecting them	Finalize data analysis on sectoral data sets	Analysis of data and evidence with key information and knowledge gaps identified, and recommended actions to fulfil the gaps	Feb 28-Mar 4 <i>(4 days off-site Ellen; 3 days Hoai)</i>	Ellen and Hoai
10	In country data collection: Facilitate technical consultations with UNICEF programme sections and with external partners to collect their inputs and perspectives about the study	In country visit by Ellen – Ellen and Hoai to conduct interviews together	Views and perspectives of both internal and external stakeholders collected and comments addressed.	Mar 9-15 <i>(5 days on-site Ellen; 5 days Hoai)</i>	Ellen and Hoai
11			Conduct debriefing to MPI and other relevant partners; and UNICEF Children and Climate Change Working Group.	Mar 20: MPI Debriefing: Mar 20 Mar 27: Unicef Rep & CC WG debriefing: Mar 27	

No	Key Tasks	Action Required	Deliverables	Time Line and number of days	Person(s) responsible
12	Draft the report	Draft Report for review by the UNICEF Viet Nam CCWG and technical consultation to be conducted by MPI (Hoai to join and co-facilitate the meeting with MPI and UNICEF)	Draft report available in English for final consultation with both internal and external stakeholders	Mar 30- Apr 30 <i>(11 days off-site Ellen; 10 days Hoai)</i>	Ellen and Hoai
13	* Key Deliverable: Draft Report April 30				
14	Review of Draft Report by UNICEF including the CCWG and MPI and other identified stakeholders	<i>Internal review of draft by key partners</i>	<i>Feedback and comments provided on Draft Report</i>	May 1-15	UNICEF and MPI
15	Finalize report with a three-page summary of key findings and recommendations (i.e. executive summary) Create a PowerPoint presentation (max 15 slides)		Final report Three-page summary of key findings and recommendations PowerPoint presentation (max. 15 slides)	May 18-22 <i>(note: May 15th is the last day for final report as per contract)</i> <i>(3 days off-site Ellen; 1 days Hoai)</i>	
16	Develop Policy brief	UNICEF and MPI to provide guidance on policy brief	Policy Brief (details to be provided by UNICEF and MPI) <i>will work with communications on this and it will be external</i>	May 22 <i>(1 day off-site Ellen)</i>	Ellen and Hoai

Potential Limitations to CLAC Study*

As in most studies, there is a potential to encounter constraints. When these occur, all reasonable efforts will be made to overcome them. It is useful to anticipate constraints prior to conducting a study in order to plan in advance how to minimize them.

Potential Constraints to CLAC Study	Strategy to Address Constraints
Government documents and/or sectoral data may not be available	To inform government officials in advance on the needs of the study; To interview those directly involved in certain sectors to obtain their perspective on issues
Pre-arranged interviews with key stakeholders may not be fulfilled due to absence or other factors	Allow flexibility in schedule to accommodate unforeseen circumstances; A support from UNICEF maybe needed on an introduction letter to arrange the meeting.
There will be a long new year holiday of Viet Nam (7 days off) during study period, some activities of project may be delayed.	Take this into account when formulating operational work plan.
*What we did not anticipate was the covid-19 pandemic – this restricted the interviews in Ha Noi to most virtual interviews as face to face was considered a risk. There was also a call by the Canadian government for all citizens to return immediately, so the time in Ha Noi was shortened by two days.	Virtual interviews were held in most cases, from Ha Noi and Canada. While it is recognized that face to face interactions are better for data collection, the virtual interviews were well conducted and satisfied all of the data requirements.

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