
Inventory of Climate Policies, Regulations, and Programs in the East Asia Pacific (EAP) region

Findings and Analytical Note



Table of Contents

ACKNOWLEDGEMENT	3
ABBREVIATION	4
1. INTRODUCTION	5
1.1 CLIMATE RISK AND HUMAN DEVELOPMENT IN EAP	5
1.2 OBJECTIVES AND SCOPE OF THIS REPORT	5
1.3 PROCESS AND METHODOLOGY	7
1.4 STRUCTURE OF REPORT	9
2. ANALYTICAL NOTE: REGIONAL	10
ANNEX: COUNTRY OVERVIEW AND SUMMARIES	32

Acknowledgement

The *Findings and Analytical Note on Inventory of Climate Policies, Regulations, and Programs in the East Asia Pacific (EAP) region* provides a commentary and interpretation on the policies, regulations, programs that are aimed at climate mitigation and climate adaptation implemented through the human development sectors or designed to protect human capital from the effects of climate risks for middle- and low-income country in the East Asia and the Pacific region.

This report has been prepared by the Asian Disaster Preparedness Center (ADPC) on behalf of the World Bank Group based on literature review, desk research and analysis of Policies, Regulations, and Programs of the development sectors such as health, education, early childhood development, social protection, and jobs that are available in public domain.

The findings, interpretations, and conclusions are documented by the ADPC Team which may not necessarily reflect the views of the World Bank Group. While every effort has been made to ensure the accuracy of the information and to the best of ADPC Team access and knowledge, the document remains open for any corrections in facts, figures and visuals.

Abbreviation

ADB	Asian Development Bank
ADPC	Asian Disaster Preparedness Center
ASEAN	Association of Southeast Asian Nations
CCMP	Climate Change Master Plan
CCS	Climate Change Strategy
EAP	East Asia Pacific
FAO	Food and Agriculture Organization
FBD	Food- borne Diseases
GHG	Green House Gas
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
LSE	London School of Economics and Political Science
MoEYS	Ministry of Education, Youth, and Sport
MOHMS	Ministry of Health and Medical Services
NAP	National Adaptation Plan
NCCAPPH	National Climate Change Action Plan for Public Health
NDC	Nationally Determined Contribution
NFSCC	National Framework Strategy on Climate Change
NGGS	National Green Growth Strategy
OHS	Occupational Health and Safety
SPC	Secretariat Pacific Community
UNFCC	United Nations Framework Convention on Climate Change
UNICEF	United Nations International Children's Emergency Fund
UNSECO	United Nations Educational, Scientific and Cultural Organization
VBD	Vector-borne Diseases
WBD	Water- borne Diseases
WHO	World Health Organization

1. Introduction

1.1 Climate Risk and Human Development in EAP

Climate change poses major challenges to environmental stability, economic growth and human development in the East Asia and Pacific region due to its countries unique locations, high dependence on the natural resources and agriculture sectors, densely populated coastal areas, weak institutions, and poverty among a considerable proportion of the population. The region includes 13 of the 30 countries most vulnerable to the impacts of climate change, and without concerted action, the region could see an additional 7.5 million people fall into poverty due to climate impacts by 2030 (World Bank, 2022).

East Asia and Pacific is also critical to global efforts to combat climate change. The region accounts for one-third of Global Greenhouse Gas (GHG) emissions and 60 percent of the world's coal consumption (World Bank, 2022). The region is also uniquely placed to act. All countries in the region have made NDC pledges, and many of the largest economies in the region have recently made ambitious commitments to reduce emissions and achieve carbon neutrality. In recent times, climate events become more frequent and severe and climate change exacerbates pre-existing challenges in countries in East Asia and the Pacific region.

There is increasing evidence that climate change is directly affecting the social, economic and human development of countries. Combating climate change therefore has become one of the key global development priorities. These extreme events have had negative impacts on almost all human development sectors Education, Health, Social Protection & Jobs, and Gender.

The seriousness of the problem has made it imperative for policy makers to begin to mainstream climate change in development policies and strategies. However, there is very little coherence between the regulations, laws, frameworks and programs of human development sectors and the commitments for climate actions. Evidence of the impacts of heat, air pollution, and other climate-related risks on human capital in both the short- and long-run has yet to be mainstreamed in human development sectors and is barely reflected in NDC implementation and the sectors' strategies

1.2 Objectives and Scope of this Report

The key focus of the study is to review the related policies, regulations and programs in

the human development sectors or ones that aim to target human development outcomes with the objective to:

1. develop an inventory of policies, regulations, and their financing arrangements that are aimed at climate mitigation and climate adaptation and are either,
 - a. implemented through the human development sectors or
 - b. designed to protect human capital from the effects of climate risks for middle- and low-income country in the East Asia and the Pacific region,
2. identify trends across countries and any outliers in the use of different policy instruments and financing,
3. determine gaps between the climate vulnerabilities that affect the EAP region and existing policies and regulations.

The Table (1) represents the list of project countries from East Asia and the Pacific Region.

Table (1): Target Countries from East Asia and the Pacific Region

Name of Country from East Asia	Name of Country from The Pacific
Cambodia	Fiji
China*	Kiribati
Indonesia	Marshall Islands,
Korea, Democratic People’s Republic	Micronesia, Fed. Sts.,
Lao PDR	Papua New Guinea
Malaysia	Samoa
Mongolia	Solomon Islands
Myanmar	Timor Leste
Philippines	Tonga
Thailand	Tuvalu
Vietnam	Vanuatu

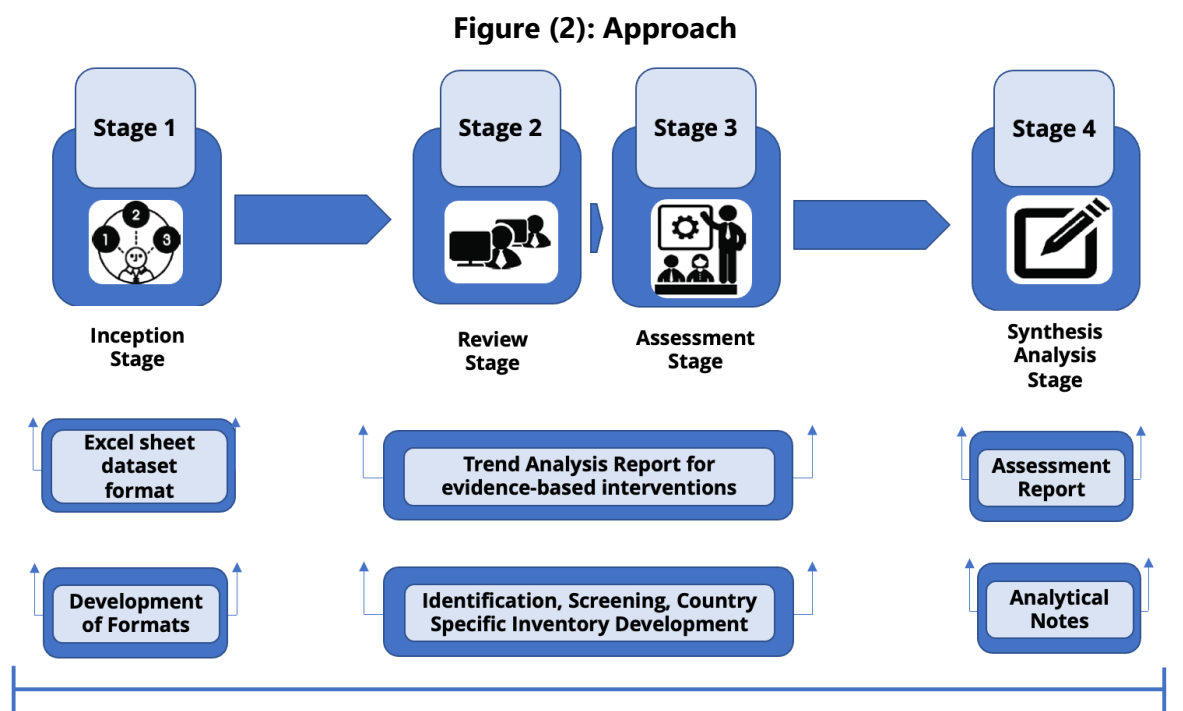
**Limited accessibility to online documents*

1.3 Process and Methodology

The methodology used for this study is mindful of the operational constraints of information/data requirements, language, digital availability, access collection, collation, and analysis at country/sector level in East Asia and the Pacific.

A systematic multicriteria search strategy has been adopted to increase the likelihood of identifying relevant documents in digital format from reliable sources.

The inventory provides a **comprehensive summary** of national policies for major human development sectors such as Education, Healthcare, Social Protection and Jobs, Early Childhood Development and their direct and in-direct **linkages** with climate change adaptation and mitigation in East Asia and the Pacific region. **Figure (2)** represents approach of the study.

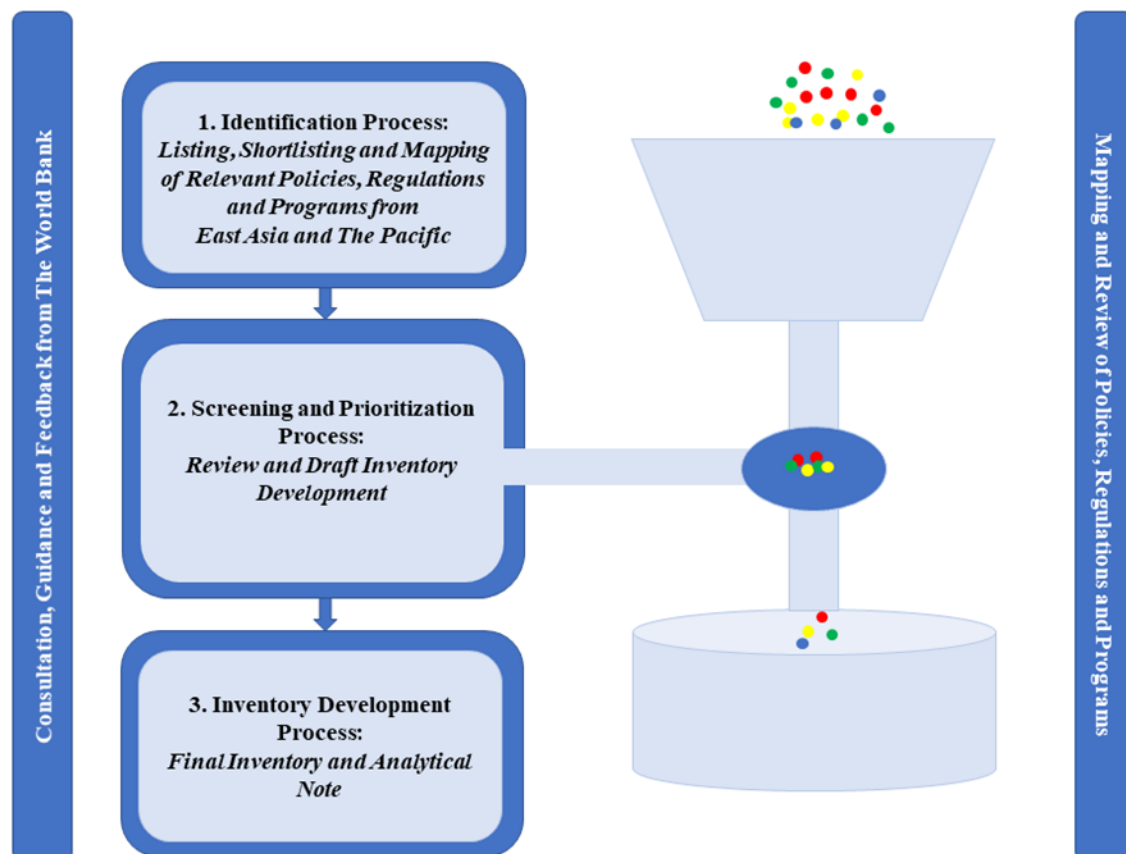


The documents which were referred to develop these inventories include Act, Agreement, Decree, Executive Order, Framework, Guidelines, Law, Plan, Policy, Proclamation, Programme, Regulation, Strategy, etc. Data and information have been collected and collated in these inventories are only from middle- and low-income countries from East Asia and the Pacific region. The search criteria for data and information collection and collation focused on key words such as Adaptation, Air Pollution, Climate, Cold Wave, Heat Wave, Tropical Cyclone, Disaster, Emergency, Environment, Flood, Hazard, Heat, Mitigation, Risk, Safety, Sea Level Rise, Temperature,

Vulnerability, Water, Education, Health, Social Security, Jobs, Childcare, Child Development, Gender

The data and information were referred in these inventories are mostly published by international and regional agencies such as Asian Development Bank (ADB), ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Center), ASEAN, Food and Agriculture Organization (FAO), Grantham Research Institute at London School of Economics and Political Science (LSE), International Labour Organization (ILO), Sabin Center at Columbia Law School, Pacific Community (SPC), The World Bank, United Nations Framework Convention on Climate Change (UNFCCC), United Nations International Children's Emergency Fund (UNICEF), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO),).

Figure (3): Methodology



The excel based inventory allows user to search, list, shortlist and map the relevant policies, regulations, law and programs from East Asia and the Pacific region. This inventory allows user to track individual country government's progress in

mainstreaming climate adaptation and mitigation in human development sectors such as education, healthcare, Social Protection & Jobs, Early Childhood Development in East Asia and the Pacific region.

1.4 Structure of Report

2. Analytical Note: Regional

2.1: East Asia

There is evidence that human development sector laws, acts, and policies developed before year 2005 have minimal reference to climate change. Before 2005 climate change associated risks and shocks were highlighted as environmental issues. After 2005, many countries revised their laws, acts and policies with the assistance from development partners.

East Asia region is severely affected by climate risks and shocks, such as extreme temperature (heat and cold), strong winds, flooding and rising sea level. Climate change has been identified as the next generation challenge by many countries in East Asia.

According to the IPCC Sixth Assessment Report Regional Fact Sheet for Asia, the observed mean surface temperature increase has clearly emerged out of the range of internal variability compared to 1850-1900 (IPCC, 2022). Heat extremes have increased while cold extremes have decreased, and both patterns are expected to continue in the future decades. Marine heatwaves will also become more common. The length and intensity of fire weather seasons will increase. Over much of Asia, average and heavy precipitation will increase. Asia's relative sea level has risen faster than the world average, resulting in coastal area loss and coastline retreat. The regional-mean sea level will rise significantly.

Countries in East Asia region have developed relevant laws, acts, and policies to support human development sectors such as Education, Health Care, Early Childhood Development, Social Protection and Jobs at national and sub-national level. There is evidence that climate risk and shocks are highlighted in many human development sector laws, acts, and policies especially in education and healthcare sectors. These laws and policies also likely reflect the overarching support of multilateral and bilateral development partners in design and development of many national level plans and strategies in East Asia for education and healthcare sectors. However, countries need to increase their efforts and resources to fully embed climate change associated risks and shocks in laws, acts, and policies by revisiting and revising these key sectoral documents. **Table (2)** represents country and sector wise number of instruments having linkages with adaptation, mitigation or both.

Human Development Sector	Adaptation	Mitigation	Both
Education	30	0	0

Health Care	49	0	1
Early Childhood Development	4	0	0
Social Protection and Jobs	9	0	0
Crosscutting Sectors			
Gender	13	0	0
Disaster Management	13	0	0
Climate Change	24	0	1
Environment	10	6	2
Total	152	6	4

Table (2) shows that climate risks and shocks are highlighted more in the education and healthcare sectors laws, acts, and policies than in the early childhood development, social protection, and jobs sectors. It is also evident that adaptation goals are more highlighted than mitigation. Mitigation goals are more visible in crosscutting laws, acts, and policies.

Countries in East Asia have developed relevant crosscutting obligatory documents such as Nationally Determined Contributions (NDC) and National Adaptation Plans (NAP). NDCs and NAPs highlights national and sectoral priorities and needs. NDC communicate a country's contribution to meeting the goals of the Paris Agreement. The NAP process helps to identify NDC adaptation goals and translate them into actions at national and local level.

In these documents climate risks and shocks are very well highlighted for human development sectors, especially for education and healthcare sectors. Early Childhood Development, and Social Protection and Jobs sector are mostly excluded in the majority of NDCs and NAPs.

Overall countries need to revise the human development sectors laws, acts, and policies based on priorities. However, urgent actions are needed to 'climate-proof' the early childhood development, and social protection and jobs sectors.

Education Sector:

In East Asia, laws, acts, and policies documents have highlighted that climate related risks and shocks are serious concerns for education sector in many countries. According to these documents, education system can be disrupted most directly by climate-related disasters such as floods, tropical cyclones and landslides by harming or even destroying schools and pertinent infrastructure, such as bridges and roads that link communities to schools. The learning process may be severely disrupted for a very long period as a direct or indirect results of infrastructure damage and potential injury. Schools can be closed by such destruction for days or even weeks. In rural areas with few options for alternative education during disasters, this can result in missed courses and inferior academic achievement when compared to other schools in the urban centers. Climate-related disasters might also cause the loss of educational resources. In more extreme circumstances, fatalities due to climate-related disasters might have effects for long-term education. **Table (3)** represents legislative and executive instruments under the education sector by country in East Asia, along with connections for adaptation and mitigation.

Education	Instrument Type						Total
	Goal	Legislative	Executive				
			Policy	Plan	Strategy	Framework	
Cambodia	Adaptation		4	6			10
	Mitigation						
Indonesia	Adaptation			1			1
	Mitigation						
Lao PDR	Adaptation		1				1
	Mitigation						
Malaysia	Adaptation		1				1
	Mitigation						
Mongolia	Adaptation			1			1
	Mitigation						
Myanmar	Adaptation	2	1	1	1		5
	Mitigation						
Philippines	Adaptation	1		2	1		4
	Mitigation						
Republic of Korea	Adaptation	3					3
	Mitigation						
Thailand	Adaptation	1		1			2
	Mitigation						
Viet Nam	Adaptation	1		1			2
	Mitigation						
Total		8	22				30

Table (3) shows that over thirty legislative and executive instruments in the education sector have specifically highlighted climate risk and shocks.

Under education sector, few countries have explicit instruments available in public domain highlighting climate risk and shocks. Cambodia and Myanmar have the most instruments in the education sector, whereas Indonesia, Lao PDR, Malaysia, and Mongolia each have one. Compared to legislative instruments, countries have established more executive tools in the education sector. Also, in comparison to mitigation, almost all legislative and executive instruments establish connection to adaptation goals.

Countries in East Asia have developed legislative instruments (law, act) under education sector that do not explicitly mention climate change but are relevant because they refer to disaster risk such as in Myanmar, and Viet Nam. In Myanmar, the National Education Law refers to the provision of exceptional education services, such as temporary emergency schools, in conflict-affected border areas, less developed areas, places with poor transportation, and disaster-affected regions. Education is included in one of the objectives connected to the provision of schooling programs to improve living conditions for disaster victims, as well as the implementation of recovery works to resume education following a disaster, in the Law on Disaster Management. **Healthcare Sector:**

In East Asia, research have highlighted that the climate change influences mortality and morbidity by establishing favorable settings for climate-sensitive infectious diseases, including Water- borne Diseases (WBD), Food- borne Diseases (FBD), and Vector-borne Diseases (VBD), and modifying their geographical distribution. For example, warmer climate often increases the risk of mosquito-transmitted diseases such as dengue fever and malaria (WHO, 2012: World Bank, 2022). World Health Organisation under "Health and Climate Change Country Profiles" have highlighted the existing vulnerability to extreme weather events and climate change, which is now predicted to experience rising temperatures, increased rainfall variability and more severe and frequent floods, drought and heat waves. The increased incidence of extreme weather events could exacerbate food insecurity, increase the risk of disease, threaten drinking-water supply and damage healthcare infrastructure in the region (WHO, 2015). **Table (4)** represents legislative and executive instruments under the healthcare sector by country in East Asia, along with connections for adaptation and mitigation.

Table (4): Country wise Legislative and Executive Instruments under Healthcare Sector in East Asia

Healthcare	Instrument						Total
	Goal	Legislative	Executive				
			Policy	Plan	Strategy	Framework	
Cambodia	Adaptation	2		6			8
	Mitigation						
Indonesia	Adaptation	3		2			5
	Mitigation						
Lao PDR	Adaptation	2	1		2		5
	Mitigation						
Malaysia	Adaptation	2	1	1			4
	Mitigation						
Mongolia	Adaptation			1			1
	Mitigation						
Myanmar	Adaptation	2	1	2	1		6
	Mitigation						
Philippines	Adaptation	2		4	2		8
	Mitigation						
Republic of Korea	Adaptation			1			1
	Mitigation						
Thailand	Adaptation	3		2			5
	Mitigation						
	Both			1			1
Viet Nam	Adaptation	2		2	2		6
	Mitigation						
Total		18				32	50

Table (3) shows that over fifty legislative and executive instruments in the healthcare sector have specifically highlighted climate risk and shocks. In comparison to mitigation, almost all legislative and executive instruments establish connection to adaptation goals under healthcare sector.

Under healthcare sector, countries in East Asia have explicit instruments available in public domain for climate change adaptation or mitigation. Cambodia and Philippines have the most instruments in the healthcare sector, whereas Mongolia, and Republic of Korea each have one. In comparison to mitigation, almost all legislative and executive instruments establish connection to adaptation goals.

Countries in East Asia have developed relevant legislative instruments related to the healthcare sector highlighting the climate change associated risks and shocks, air pollution and environmental health issues such as in Viet Nam. In Viet Nam, Law on Natural Disaster Prevention and Control, natural disaster prevention and control funds are identified to support the repair of health establishments. The

legislation also requires that the construction in natural disaster-prone areas need to consider the use of these spaces for people's evacuation and as emergency stations. The Ministry of Health is assigned responsibility for emergency provision of medicines, medical equipment and first aid before, during and after natural disasters. In Viet Nam, Law on Environmental Protection provides statutory provisions for the protection of the environment, which includes those factors that can affect human health and cause human diseases. It includes the management of project risks posed to the environment and community health. This law includes a specific chapter on response to climate change, assigning responsibilities and requiring that all environmental protection activities should consider climate change response. While it doesn't explicitly connect human health with climate change, this is done throughout the legislative instrument when linking environmental protection more generally. In regard to the implementation of the law enforcement on environmental protection in the areas of health, food hygiene safety, water source management, waste management and pollution, the responsibility is assigned to the Minister of Health, along with coordination with the Minister of Natural Resources and Environment, heads of ministerial bodies and People's Committees.

Countries in East Asia have developed many executive instruments related to the healthcare sector highlighting the climate change associated risks and shocks, pollution and environmental health issues such as in Cambodia, Lao PDR, Myanmar, Philippines, Thailand. In Cambodia, the National Climate Change Action Plan for Public Health (NCCAPPH) 2019–2023 is the primary sectoral executive document fusing climate change and health. It is in line with the strategic goals of the Cambodia Climate Change Strategic Plan and the Health Strategy Plan and helps to achieve them. The National Strategic Plan for Climate Change Adaptation and Disaster Risk Reduction in Health serves as the basis for the Plan, which also builds on earlier sectoral planning documents. The plan's actions are categorized into strategic objectives. These further have as their primary objectives enhancing institutional capacity of medical staff, coordination and partnerships, surveillance and vulnerability assessment, information sharing, and care delivery. The plan also specifies roles, deadlines, and indicators for each action that will be taken during the strategy period. The current investigation also found additional pertinent materials that are worth highlighting because they emphasize the connection between health and climate change. Although the pertinent activities are in line with the policy documents previously indicated, the focus of these documents is not primarily on climate change. In Cambodia, Health Information System Master Plan 2016-2020 includes an action to improve illness surveillance and response systems, as well as emergency public health measures, as a support action for the NCCAPPH. The Ministry of Health regulation on

workplace temperature and ambiance mandates companies to keep working temperatures to acceptable ranges.

In Lao PDR, the Climate Change and Health Adaptation Strategy 2018-2025 incorporates the climate priorities of the National Adaptation Programme of Action to Climate Change for the health sector. The NSCC has two adaptation measures for the public health sector: undertake evaluations of the health sector's climate change impacts and establish and implement the sector's climate change adaptation strategy. Furthermore, the National Green Growth Strategy 2030 (NGGS) in Lao PDR, highlights the health sector as a key supporting sector to the strategy's and sustainable development goals' achievement. This involves a particular emphasis on nutrition, access to safe drinking water and sanitation, lowering maternity and child mortality rates, and boosting access to health care. Strengthening policy initiatives on disaster risk reduction, health and social protection, information and awareness, resources for community preparedness, and establishing climate resilience infrastructure and systems are among the response measures identified for the health sector.

In Myanmar, National Climate Change Policy (NCCP) recognizes the need for sustainable resource extraction in line with climate change mitigation and adaptation priorities in order to safeguard public health as well as the rising health risks and vulnerabilities brought on by climate change impacts. The operational tools of the NCCP are the Climate Change Strategy (CCS) and Master Plan (CCMP). In addition, they link climate change, health, and social protection to disaster risk reduction and highlight the health sector as one of the major contributors to planned and present economic and social development. The documents' answers are consistent with other pertinent plans and procedures. The CCMP offers more particular information on the steps needed to accomplish the CCS's overall objectives, including activities to be taken specifically, timelines, a breakdown of stakeholder roles and responsibilities, as well as indicators and outputs that will serve as a framework for implementation. While some of the acts and activities mentioned in the documents refer to health, others are more generic in nature and might apply to most industries. Sector collaboration is now possible throughout implementation to guarantee that the actions taken and the results obtained are in sync.

In Philippines, according to the National Framework Strategy on Climate Change 2010–2022 (NFSCC), the health sector is particularly vulnerable to climate change due to rising endemic morbidity and death rates as well as the worsening of vector- and water-borne diseases. It acknowledges that the management of the outcomes of illnesses, disabilities, and fatalities as a result of climate hazards is entrusted to the

health sector. Three targets for the health sector have been specified in the strategy: assessing the sector's climate change vulnerability; improving climate sensitivity and responsiveness; and enhancing disease surveillance and emergency response. National Climate Change Adaptation in Health (CCA) Strategic Plan 2014–2016, which built on the NFSCC, aimed to strengthen mitigation and adaptation initiatives, empower communities, and increase the health care delivery system's adaptable potential. It includes a breakdown of the funding required, timetables for implementation, specific roles, and seven strategies outlining sixteen main result areas. All three levels of government are given responsibilities, which outline the duties of numerous agencies and partners. The plan served as inspiration for the creation of individual action plans by fourteen Centers for Health and Development.

In Thailand, Climate Change Master Plan 2015-2050 (CCMP) reinforces this requirement as a framework for long term planning within these government departments and agencies. The CCMP recognizes the connections of climate change and development and the need for continuous review to ensure alignment of different sectoral policies, goals, approaches and measures. Within it, the health sector is identified as a high-priority sector, due to rising temperatures and rainfall in many areas of Thailand and the impact on vector-borne and water-borne diseases. Long-term health-care priorities include reducing childhood malnutrition, strengthening disease surveillance, and lowering per capita healthcare expenses associated with climate change. The Climate Change and Public Health Strategic Plan 2015-2020 provides additional strategic guidance on health and climate change. The plan's key strategies include spreading knowledge, increasing public preparedness for dealing with health impacts, increasing collaboration with the sector, improving surveillance and warning systems, and advocating for lower greenhouse gas emissions and community prevention and mitigation of climate impacts.

Countries in East Asia developed their Nationally Determined Contributions (NDCs), emphasizing the importance of healthcare sector as an enabler in the implementation of adaptation efforts in countries such as in Viet Nam, Thailand, Mongolia, Cambodia. In Viet Nam, according to NDC, climate change has the potential to have a negative influence on public health. The NDC does say that adaptation measures to mitigate the effects of future climate change on public health have been identified. However, no extra information is particularly provided. The NDC acknowledges that the health sector contributes little to mitigation; nevertheless, it does mention mitigation actions on health care service infrastructure, such as energy-saving and energy efficiency. In Thailand, under NDC, one of the key prioritized adaptation efforts is to increase capacity to manage climate-related health impacts.

This includes through the development of health surveillance and early warning systems, climate risk assessment, and disease prevention and response measures. NDC acknowledges that the prioritized actions are all essential to build Thailand’s resilience to climate impacts. NDC itself does not include specific details on implementation, it does address the need for improved stakeholder capacity development, the allocation of adequate financial resources, and planning.

In Mongolia, NDC identified public health as a key theme under adaptation goal. The key goal is to strengthen healthcare services and capacities for early warning and the provision of proactive response measures. This involves the assessment of risks and impacts of climate change on the sector, building knowledge and awareness, empower the public to adopt proactive behaviors, and strengthening health institution capacity to respond to health risks. In Cambodia, health and climate change adaptation actions have been integrated at the national level within the NDC. The priority climate related health challenges that occur within NDC are vector-borne diseases, waterborne and foodborne diseases, and the health impact of extreme weather events. The NDC assesses the vulnerability of the human health sector, identifying the impact of temperature and rainfall pattern changes on the priority challenges identified above.

Social Protection and Jobs Sector:

In East Asia, there are very few laws, regulations, and policies that highlight the risks and shocks linked with climate and social protection and jobs sector. Countries have developed acts, laws, and policies primarily for social security and social welfare, such as policies for insurance, pensions, and provident funds, among key once. Some countries have built national social protection policy frameworks that are linked to climate, disaster, and environmental challenges in their respective countries. These frameworks emphasize that poor and vulnerable families are more vulnerable to the risks of climate change, such as floods, droughts, and storms. According to these rules, the government shall manage food supplies delivered to vulnerable families during disasters. **Table (5)** represents country wise legislative and executive instruments under social protection and jobs sector in East Asia.

Table (5): Country wise Legislative and Executive Instruments under Social Protection and Jobs Sector in East Asia							
Social Protection and Jobs	Instrument						Total
	Goal	Legislative	Executive				
			Policy	Plan	Strategy	Framework	
Country							
Cambodia	Adaptation		1	1			2

	Mitigation						
Indonesia	Adaptation						
	Mitigation						
Lao PDR	Adaptation						
	Mitigation						
Malaysia	Adaptation						
	Mitigation						
Mongolia	Adaptation						
	Mitigation						
Myanmar	Adaptation	1		1			2
	Mitigation						
Philippines	Adaptation	1					1
	Mitigation						
Republic of Korea	Adaptation		1				1
	Mitigation						
Thailand	Adaptation	1					1
	Mitigation						
Viet Nam	Adaptation	1			1		2
	Mitigation						
Total		4				5	9

Table (5) shows that only nine legislative and executive instruments in the social protection and jobs sector have specifically highlighted climate risk and shocks. In comparison to mitigation, almost all legislative and executive instruments establish connection to adaptation goals under social protection and jobs sector.

Under social protection and jobs sector, countries in East Asia have minimal instruments available in public domain for climate change adaptation or mitigation. Cambodia, Myanmar and Viet Nam each have two instruments in the social protection and jobs sector. In comparison to mitigation, almost all legislative and executive instruments establish connection to adaptation goals.

Countries in East Asia have developed legislative and executive instrument such as Green job acts and strategies to help, preserve or restore the condition of the environment while also respecting workers' rights, offering fair wages, and giving security and social safety to families. It recognizes the need for proper standards for the assessment and certification of green goods, services, and technologies in order to regulate incentives such as in Viet Nam, Lao PDR, Philippines, Myanmar.

In Viet Nam, National Green Growth Strategy promotes fast development of green economic sectors to create jobs, formulate master plans on the development of sectors, production activities and services for pollution prevention, environmental

rehabilitation/restoration, generation of jobs in urban and rural areas. In Lao People's Democratic Republic, National Green Growth Strategy (NGGS) has identified the promotion of the expansion of the coverage and management of the national security system to ensure the protection and management of climate change impacts as a focus area. In Myanmar, Social Protection Strategic Plan tackles the four major dimensions of social protection: protective, preventative, promotional, and transformative. The preventative dimension emphasizes the need for effective methods to assist communities in preparing for, responding to, and recovering from disasters and emergencies, especially those caused by climate change. Improving catastrophe risk management social protection measures is a central component of the approach. The strategy includes timetables, relevant agencies, and indicators for measures to improve the country's social protection mechanisms.

In Vietnam, Law on Occupational Safety and Health in Vietnam does not specifically address disaster risk reduction or climate change, although it does include environmental contamination in the workplace. It includes demands for environmental monitoring in order to prevent and combat occupational diseases while minimizing harm to workers. In Philippines, Green Jobs Act of 2016 promotes climate change mitigation practices through the creation of green jobs.

Early Childhood Development Sector:

Children’s health, nutrition, education, development, survival, and future potential are seriously threatened by climate change. Children require more food and water per unit of body weight than adults do, and they are also less able to withstand extreme weather conditions. They are also more vulnerable to infections, hazardous chemicals, and temperature changes, among other things, than adults are (UNICEF, 2022). Similarly to the social protection and jobs sector, very few laws, acts, and policies in the early childhood development sector in East Asia have highlighted climate risks and shocks. **Table (6)** represents country wise legislative and executive instruments under early childhood development sector in East Asia.

Table (6): Country wise Legislative and Executive Instruments under Early Childhood Development Sector in East Asia							
Early Childhood Development	Instrument						Total
	Goal	Legislative	Executive				
			Policy	Plan	Strategy	Framework	
Country							
Cambodia	Adaptation		1				1
	Mitigation						
Indonesia	Adaptation						
	Mitigation						

Lao PDR	Adaptation					
	Mitigation					
Malaysia	Adaptation					
	Mitigation					
Mongolia	Adaptation	1				1
	Mitigation					
Myanmar	Adaptation					
	Mitigation					
Philippines	Adaptation					
	Mitigation					
Republic of Korea	Adaptation					
	Mitigation					
Thailand	Adaptation					
	Mitigation					
Viet Nam	Adaptation	1		1		2
	Mitigation					
Total		2			2	4

Table (6) shows that only four legislative and executive instruments in the early childhood development sector have specifically highlighted climate risk and shocks. In comparison to mitigation, almost all legislative and executive instruments establish connection to adaptation goals under social protection and jobs sector.

Countries in East Asia have developed legislative and executive instrument to help Early Childhood Development Sector such as Viet Nam, Mongolia, Cambodia.

In Viet Nam, Law on Children is the key legislation related to the rights of children. This includes the right to be protected while suffering from natural disasters or environmental pollution, and the right to all forms of special assistance. In the Mongolian Law on the Protection of the Rights of the Child, it is mentioned that children who are in very challenging or difficult conditions should receive social care and help. This also applies to situations involving natural disasters. This might be extended to discuss the effects of climate change and take into account anticipated future developments that might affect the sector.

In Cambodia, National Policy on Early Childhood Care and Development highlights environmental pollution as major concern. This policy suggests to prevent all types of environmental pollution, which adversely impact early childhood care and development; suggest teachers, parents or guardians to protect young children and to see and understand the importance of the environment.

Aside from these, there is little evidences on the climate risk and shocks inclusion in the Early Childhood Development Sector in East Asia.

2.2 The Pacific region

Climate change mitigation and adaptation measures relevant to the human development sectors are mostly highlighted in the country level climate change policies, national adaptation plans (NAP) and nationally determined contribution (NDC) documents in the pacific region. Moreover, the majority of the documents encountered on public digital domains are executive documents (strategies and action plans) which address the challenges of the human development sectors due to climate change. Moreover, majority of the documents encountered online are falling under Education and Health care sectors (Table 8 & Table 9).

Table (7) represents country and sector wise instruments in The Pacific and linkages with adaptation, mitigation or both. The data presents that major portion of the documents emphasize on climate change adaptation goals.

Table (7): Country and Sector wise Instruments in The Pacific			
The Pacific			
Sector	Adaptation	Mitigation	Both
Education	33	0	6
Health Care	29	2	4
Early Childhood Development	1	0	0
Social Protection and Jobs	26	0	2
Gender	21	0	3
Disaster Management	4	0	0
Climate Change	27	0	2
Environment	2	1	0
Total	143	3	17

Education sector:

Most of the documents that address climate risks are executive documents of the type Policies and Plans (Table 8). Majority of legislative documents under the Education sector (Laws/ Acts) encountered on the public digital domain do not highlight about climate risks (Table 8). Education Sector strategic plans have been developed in some countries by their respective Ministries of Education (Fiji, Kiribati, Micronesia, PNG, Solomon Islands, Tuvalu and Vanuatu). Such plans have proposed actions to address climate risks posed by the Education sector. For instance, the National Education Plan 2020-2029, recognizes the importance of creating climate resilient infrastructure, including considering climate change and disaster risk reduction into the design of classrooms. In addition, the Quality Education focus area refers to the development of climate change and disaster risk reduction curriculum support materials.

Climate change policies and National adaptation Plans (NAP)/ Nationally Determined Contributions (NDCs) too list out priority actions/strategies to address possible climate risks in the Education sector. These documents had been published after the year 2015. One of the most common actions suggested in these documents are the incorporation of information on climate change mitigation and adaptation into the school curriculum. Further, in countries like Fiji, PNG, Samoa and Vanuatu education sector related priority actions are incorporated in disaster risk management strategies/plans. These actions/interventions are financed by external donor agencies and via national budgets of the respective countries.

There seems to be no available policies and plans developed focusing on particular climate risk such as school safety against floods. Moreover, the documents do not specify what type of climate risk is affecting the Education sector most.

Table (8) represents country wise legislative and executive instruments under education sector in The Pacific and its data shows that majority of the actions presented in the documents are related with climate change adaptation goals.

Table (8): Country wise Legislative and Executive Instruments under Education Sector in The Pacific							
Education	Goal	Instrument				Total	
		Legislative	Executive				
			Policy	Plan	Strategy		Framework
Country							
Fiji	Adaptation	2	1	3			6
	Mitigation						
	Both					1	1
Kiribati	Adaptation			2			2
	Mitigation						
	Both		1		1		2
Marshall Islands	Adaptation		1	1	1		3
	Mitigation						
	Both						
Micronesia	Adaptation		1	1			2
	Mitigation						
	Both	1					1
PNG	Adaptation		1			1	2
	Mitigation						
	Both			1			1
Samoa	Adaptation	1	1				2
	Mitigation						

	Both						
Solomon Islands	Adaptation		1	1		1	3
	Mitigation						
	Both						
Timor-Leste	Adaptation			2			2
	Mitigation						
	Both			1			1
Tonga	Adaptation		1	1			2
	Mitigation						
	Both						
Tuvalu	Adaptation	2	1	2			5
	Mitigation						
	Both						
Vanuatu	Adaptation	1	1	2			4
	Mitigation						
	Both						
Total		7				32	39

Health Sector:

World Health Organization (WHO) is playing a major role in mainstreaming climate change mitigation and adaptation in the Pacific countries. Some of the countries in assistance with WHO together with their health ministries have developed necessary national strategies and plans (Fiji, Kiribati, Papua New Guinea). Such plans provide directions for raising awareness about climate change effects and health responses among the public and key stakeholders, strengthen preparedness and resilience to public health emergencies etc. Some of the strategies addresses climate sensitive health risks that should be considered in climate change adaptation planning. In Kiribati, National Climate Change and Health Action Plan describes the specific health risks posed by climate change in Kiribati such as water safety and water-borne diseases, food safety and food-borne diseases and vector borne diseases. Adaptation strategies include improving monitoring and surveillance and capacity building for health sector staff. In Tonga, the Environment Management Act contains a regulation on air pollution, which is a risk affecting the health and wellbeing of the population.

Country level NDCs, acknowledged the significant impacts by climate change, and have provided references to documents where adaptation priorities are listed. For instance, in Samoa, the NDC notes that health sector priority areas are highlighted within the Community Integrated Management Plans and National Climate Change Policy 2020-2030.

Legislative and executive documents related to Disaster Risk Reduction too lists out priority actions for the health sector. In Papua New Guinea, the health sector priority is carried into the National Disaster Risk Reduction Framework 2017-2030. This is recognized in target 4 which aims to reduce the damage to critical infrastructure and the disruption of basic services among health facilities.

Table (9) represents country wise legislative and executive instruments under healthcare sector in The Pacific. The data shows that majority of the documents encountered on public digital domains are executive documents (strategies and plans) developed in the field of climate change and disaster risk reduction. Major portion of the actions proposed in the documents are related with climate change adaptation goals.

Table (9): Country wise Legislative and Executive Instruments under Healthcare Sector in East Asia							
Healthcare	Goal	Instrument				Total	
		Legislative	Executive				
Country			Policy	Plan	Strategy	Framework	
Fiji	Adaptation	2		3			5
	Mitigation			1			1
	Both			2			2
Kiribati	Adaptation		1	4			5
	Mitigation						
	Both		1				1
Marshall Islands	Adaptation		1	1	2		4
	Mitigation						
	Both						
Micronesia	Adaptation		1				1
	Mitigation						
	Both						
PNG	Adaptation		1	2		1	4
	Mitigation						
	Both						
Samoa	Adaptation		1	1	1		3
	Mitigation						
	Both						
Solomon Islands	Adaptation		1				1
	Mitigation						
	Both						
Timor-Leste	Adaptation			2			2

	Mitigation						
	Both			1			1
Tonga	Adaptation		1	1			2
	Mitigation	1					1
	Both						
Tuvalu	Adaptation			1			1
	Mitigation						
	Both						
Vanuatu	Adaptation			1			1
	Mitigation						
	Both						
Total		3				32	35

Social Protection and Jobs Sector:

Pacific countries have highlighted climate change adaptation and mitigation aspects relevant to social protection in both legislative and executive documents.

For instance, in Fiji, the National Employment Policy proposes the analysis of current and planned investments by governments, donors, and the private sector to gain better information about new green jobs or green skills sets needed for occupations; elaboration of new environmental policies to support development of green job skills strategies for implementation and the review of education and training curricula related to green skills should be reviewed periodically.. Fiji low emission development strategy Proposes to foster green employment the Fijian Government will support mechanisms for building skills and accessing information, markets, and finance. This includes development of ICT services for all sectors which has potential, in itself, to reduce emissions, and also include sustainable resource management and use and adaption to climate change (such as choice of climate-resilient crops).

Climate change and disaster risk management documents too highlight actions relevant for social protection.

For example, Fiji Climate change act refers to climate displacement and relocation and establishes the Fijian Taskforce on the Relocation and Displacement of Communities Vulnerable to the Impacts of Climate Change. In Micronesia, the Nationwide Integrated Disaster Risk Management and Climate Change Policy insists on adapting development and economic activities to gradual changes in average temperature, sea level, ocean acidification and precipitation and on preventing environmental migration through adaptation strategies, while addressing human mobility associated with natural disasters and climate change through durable solutions.

Most of the NDCs have addressed climate related issues in the social protection sector.

However, in Tuvalu, information related to Social Protection and climate

change could not be found. Although climate change mitigation and adaptation strategies are found in the NDCs and National Adaptation Plans, sectoral laws and acts highlighting same appears to be lacking.

Table (10) represents country wise legislative and executive instruments under social protection and jobs sector in The Pacific. Majority of the documents encountered in digital public domains under this sector which have linkages with climate change mitigation and adaptation are executive documents (strategies and plans) developed in the field of climate change and disaster risk reduction. The majority of the actions found are related with climate change adaption goals.

Table (10): Country wise Legislative and Executive Instruments under Social Protection and Jobs Sector in The Pacific							
Social Protection	Instrument						Total
	Goal	Legislative	Executive			Framework	
			Policy	Plan	Strategy		
Country							
Fiji	Adaptation	3	2		1		6
	Mitigation						
	Both					1	1
Kiribati	Adaptation			2			2
	Mitigation						
	Both						
Marshall Islands	Adaptation	1			1		2
	Mitigation						
	Both						
Micronesia	Adaptation		1				1
	Mitigation						
	Both						
PNG	Adaptation		2	1		1	4
	Mitigation						
	Both						
Samoa	Adaptation		1	1			2
	Mitigation						
	Both	1					1
Solomon Islands	Adaptation		1	1			2
	Mitigation						
	Both						
Timor-Leste	Adaptation			2			2
	Mitigation						

	Both						
Tonga	Adaptation			1			1
	Mitigation						
	Both						
Tuvalu	Adaptation	1					1
	Mitigation						
	Both		1				1
Vanuatu	Adaptation		1	2			3
	Mitigation						
	Both						
Total		6				23	29

Early childhood Development

There were very few legislative and executive documents (policies, plans and strategies) that could be found under this sector, available on public digital domains. However, in Tuvalu, the Early Childhood Care & Education policy incorporates strategies to improve disaster risk management for the early childhood development sector in order to provide secure and safe environments. This includes ensuring disaster response procedures are followed, ensuring child safeguarding policies are followed during disasters, that all children complete disaster drills at least once per term, and that buildings are disaster-proof. The NDCs and National Adaptation Plans of the countries does not appear to be covering this sector.

Table (11) represents country wise legislative and executive instruments under early childhood development sector in The Pacific. The table shows that there were very few legislative and executive documents (policies, plans and strategies) that could be found under this sector, available on public digital domains.

Table (11): Country wise Legislative and Executive Instruments under Early Childhood Development Sector in The Pacific							
Early childhood development	Goal	Instrument					Total
		Legislative	Executive				
			Policy	Plan	Strategy	Framework	
Country							
Fiji	Adaptation						
	Mitigation						
	Both						
Kiribati	Adaptation						
	Mitigation						
	Both						
Marshall Islands	Adaptation						
	Mitigation						

	Both						
Micronesia	Adaptation						
	Mitigation						
	Both						
PNG	Adaptation						
	Mitigation						
	Both						
Samoa	Adaptation						
	Mitigation						
	Both						
Solomon Islands	Adaptation						
	Mitigation						
	Both						
Timor-Leste	Adaptation						
	Mitigation						
	Both						
Tonga	Adaptation						
	Mitigation						
	Both						
Tuvalu	Adaptation						
	Mitigation						
	Both						
Vanuatu	Adaptation		1				1
	Mitigation						
	Both						

Annex: Country Overview

East Asia

Cambodia

Cambodia is one of the most disaster-prone countries in Southeast Asia, with seasonal floods and droughts. Cambodia's vulnerability to climate change is linked to its post-civil war, least developed, largely agrarian characteristics, with approximately 80% of the people residing in rural areas. The country's vulnerability to climatic variability and change is exacerbated by a lack of adaptive capacities, weak infrastructure, and limited institutions. Indeed, the government recognizes floods and droughts as major causes of poverty. During the 20-year period from 1987 to 2007, a series of droughts and floods caused severe loss of life and economic damage (World Bank, 2022).

Education Sector

In Cambodia, there is no specific national policy related to the integration of climate change adaptation or mitigation in the education sector. However, the Law on Education promotes lifelong education for public understanding of the environment and society, and this is supported by the Policy for Curriculum Development 2005-2009 which encourages interest in sciences through educational institutions. The intersection of vulnerability and climate change is considered in policies that acknowledge this link by targeting vulnerable communities with a focus on reaching more excluded groups due to geography, environment, social instability, life situation or culture, ensuring graduates are equipped with knowledge and skills to contribute fully to national development in a rapidly changing environment, and with a focus on the education of those in flooded and/or at high risk to natural disaster. These themes are also translated to the Education of All National Plan 2003-2015. The most relevant strategic plans are those that refer to disaster management and resilience. The Education Strategic Plan 2019-2023 considers provisions for natural disaster management, and the provision of health care services at all levels, and the Cambodia Education Response Plan to COVID 19 Pandemic aims to develop and embed strategies for disaster resilience in the education sector. In addition, the Emergency Preparedness and Response Plan for Education 2019 contributes to decision making and effective planning in the education sector for disaster management, including facilitating cooperation from national government, subnational level, and schools.

The Nationally Determined Contributions (NDC) highlight the role of the education sector as an enabler to facilitate the implementation of adaptation actions. The focus is on education to increase school enrolment for children, particularly girls, also ensuring that the impacts of climate change do not disproportionately affects girls'

access to education. Responsibility for education focused enabling actions have been allocated to the Ministry of Education Youth and Sport (MoEYS). These actions include upgrades to curriculum in primary and non-formal education, training for education officials, and to build centres of excellence for university education and research. Prioritized adaptation actions assigned to the MoEYS are identified in the NDC to develop resilient infrastructure of school buildings.

Health Sector

Health and climate change adaptation actions have been integrated at the national level in several key strategic documents, including sectoral specific strategies, integrated health and climate change action plans, and within the NDC. The priority climate related health challenges that occur within these documents are vector-borne diseases, waterborne and foodborne diseases, and the health impact of extreme weather events. The NDC assesses the vulnerability of the human health sector, identifying the impact of temperature and rainfall pattern changes on the priority challenges identified above. Five priority adaptation actions have been identified in the NDC for the human health sector. These actions are "(1) Enable effective decision-making for health interventions through generation of information and improved surveillance or early-warning systems"; "(2) Enhance climate resilience in health service delivery Human health MOH"; "(3) Strengthen and provide capacity building of technical guidelines for diagnosis, detection, control, prevention and treatment of vector-borne and water-borne diseases, injuries and other food poisoning illnesses arising from climate change"; "(4) Conduct water sanitation and hygiene (WASH) assessments on climate change and develop planning for communities and health facilities"; "(5) Strengthen institutional capacities to effectively integrate climate risks and adaptation options in health sector planning and implementation" assigned to the Ministry of Health.

The focus of these actions is to increase institutional capacities, such as to support the development of technical guidelines, integration into planning processes, and improved service delivery, as well as improving early warning and surveillance systems, and undertaking WASH assessment. The link between human health benefits and climate change mitigation actions is identified in the NDC.

The National Climate Change Action Plan for Public Health (NCCAPPH) 2019-2023 is the key sectoral strategic document integrating health and climate change. It is aligned with and contributes to the achievement of strategic objectives of the Cambodia Climate Change Strategic Plan and the Health Strategy Plan. The Plan is driven from the National Strategic Plan for Climate Change Adaptation and Disaster Risk Reduction

in Health and builds on previous sectoral planning documents. Actions with the plan are grouped into six strategic objectives. These are focused on improving governance, coordination and partnerships, strengthening institutional capacity of medical personnel, strengthening surveillance and vulnerability assessment, information sharing, and improving service delivery. The action plan also identifies responsibilities, timeframes and indicators for all actions within the strategy period. In addition, the present study identified other relevant documents worthy of mentioning that highlight the link between health and climate change. The focus of these documents is not specifically climate change, though the relevant actions are aligned to the policy documents mentioned above. Supporting action of the NCCAPPH, the Health Information System Master Plan 2016-2020 has an action to improve disease surveillance and response system and emergency public health interventions. The Ministry of Health regulation on temperature and ambience in the workplace requires employers to manage workplace temperatures to acceptable levels. Within the Law on Disaster Management, the health sector is identified as having a role in mobilizing for disaster relief and emergency response operations by providing specialized services, spaces and shelters.

Social Protection and Jobs Sector

Climate change risk is only considered in a general sense related to the risk to poor and vulnerable in the National Social Protection Policy Framework. It is mentioned once and does not expand on the issue beyond this reference. This could include expanding consideration of natural disaster and climate change impacts within emergency responses with the framework and social protection mechanisms such as health care benefits provided by the government.

Early Childhood Development Sector

Within the Early Childhood Development Sector, there is one key national level policy that considers aspects of climate change adaptation. However, there is no direct reference to climate change within the policy. Rather the policy considers related aspects such as environmental pollution, food security and health and well-being. The policy objectives in this area are focused on the promotion of a healthy environment, and communicating and raising awareness within the community, with the parents and guardians as role models in displaying pro-environmental behaviors in order to educate young children in the home.

Indonesia

The Republic of Indonesia, herein Indonesia, is the world's largest archipelagic state, consisting of more than 17,500 islands with over 81,000 kilometers (km) of coastline.

Indonesia is extremely vulnerable to the effects of climate change, including catastrophic occurrences such as floods and droughts, as well as long-term changes caused by sea level rise, alterations in rainfall patterns, and rising temperatures. The coastal areas of Sumatra, parts of western and northern Sulawesi, and the southeastern Papua islands are all extremely vulnerable to a variety of climate hazards, including drought, floods, landslides, and sea level rise—but not cyclones. Java is Indonesia's most densely inhabited island. Indonesia is ranked 12th out of 35 nations in the World Bank's analysis of global risk factors that are associated with a relatively high mortality risk. The western and eastern portions of the island of Java are thought to be hotspots for the effects of several hazards, according to a recent vulnerability mapping exercise undertaken for South East Asia. Earthquakes, tsunamis, volcanic eruptions, floods, landslides, droughts, and forest fires are only a few examples of these geological or hydro-meteorological hazards. (World Bank, 2022)

Education Sector

One of Indonesia's key legislative instruments related to education, the Law on National Education System does not refer to climate change. However, the law includes reference to the provision of education with special services for remote and less developed areas, isolated areas, and learners who are victims of natural disasters, or vulnerable socially or economically. It also refers to the development of learning materials to improve understanding and analytical thinking towards natural surroundings and environment.

Indonesia's NDC stipulates that one of the key means of implementation of the NDC is capacity building which is aligned to the Government's vision on education. It is focused on human resources development and investment, regulatory reform to increase the effectiveness of programmes, the revitalization of vocational education, creation of employment and business opportunities, and technology. Education is also mentioned under the "social and livelihood resilience" adaptation theme, and includes public awareness, and stakeholder engagement for climate change and disaster preparedness. Coastal zone protection, under the "ecosystem and landscape resilience", is also specifically mentioned in regard to increasing communication, education and public awareness of the role of coastal ecosystems in natural disaster impact reduction, and the engagement of communities for indigenous knowledge. Responsibilities and timeframes for specific actions are not assigned.

Health Sector

Indonesia's NDC acknowledges the need for improved provision of health services in order to deliver on the country's climate resilience goals, as well as reducing the risks on the health sector. The NDC's adaptation approach, includes reference to managing

climate risks including health, as well as increasing stakeholder participation in health protection, and enhancing community capacity. Responsibilities and timeframes for specific actions are not assigned.

Gender Sector

Indonesia's long-term NDC strategy identifies the importance of a just and inclusive transition of the workforce to low greenhouse gas emission and climate resilient development. It acknowledges that this also needs to take into account gender and inter-generational inequalities. Specifically, the NDC mentions capacity building as one approach to consider gender needs. For the adaptation theme "social and livelihood resilience" one strategy to strengthen community engagement in development planning identifies the needs to consider gender participation, gender equity and gender balance. Responsibilities and timeframes for specific actions are not assigned.

2.4 Early Childhood Development Sector

No relevant documents.

Lao People's Democratic Republic

Lao People's Democratic Republic (Lao PDR), is a landlocked country in Southeast Asia. Flooding and droughts are common occurrences in Lao PDR. Poverty and malnutrition persist, and with such a large part of the Lao PDR's population reliant on agricultural operations as their primary source of income, climate change is projected to have a significant influence on the country and its residents. Climate change has been noted as having a specific influence on the country's water and forestry resources, agriculture, energy, and health sectors. (World Bank, 2022)

Education Sector

Education and awareness raising is identified in the NDC as a focus of near-term planning and actions. It aligns with the National Strategy on Education and Awareness on the Environment and Climate Change. It is identified as a key element in climate change projects to enhance the understanding of stakeholders on greenhouse gas emissions and climate change impacts. The NDC also acknowledges the need to address the adaptation gap of investment in education and technical skills development to support planning. The NDC does not include any specific mitigation or adaptation actions.

Under the Education and Sports Sector Development Plan (2016-2020), improved vocational education and training in relation to the environment is identified as an action.

National Strategy on Climate Change of the Lao PDR (to 2030, vision to 2050) (NSCC) identifies public education, awareness and participation as one of its guiding principles. It refers to strengthening education, dialogues, access to information, awareness raising and encouraging the general public in taking responsibility and contributing to climate change management. Specific priority actions for the education sector between 2021-2030 include conducting capacity needs assessments, improving climate change centers and curriculum for both formal and non-formal education at all levels, and developing capacity building programs for teachers.

Health Sector

The health sector is identified as a key sector for long-term adaptation objectives and current/near-term planning and actions of the NDC. The long-term objectives are to increase the resilience of public health infrastructure and improve public health services.

The Strategy on Climate Change and Health Adaptation 2018 – 2025 embeds the climate priorities of the National Adaptation Programme of Action to Climate Change specifically for the health sector. Within the NSCC there are two adaptation actions for the public health sector, conduct assessments of climate change impacts on the health sector, and develop and implement the sector's climate change adaptation plan. In addition, the National Green Growth Strategy to 2030 (NGGS) identifies the health sector as an important supporting sector to the achievement of the strategy and sustainable development goals. This includes a specific focus on nutrition, access to clean water and sanitation, decreasing maternity and child mortality rates, and improving access to health services.

Social Protection and Jobs Sector

The NGGS has identified the promotion of the expansion of the coverage and management of the national security system to ensure the protection and management of climate change impacts as a focus area.

Early Childhood Development Sector

No relevant documents.

Malaysia

Malaysia is a tropical nation in Southeast Asia, comprised of the Malaysian Peninsula, and Malaysian Borneo. Malaysia's geographical location and low poverty rates mean that it is less at risk and vulnerable to natural disasters than some of its East Asian

neighbors. While Malaysia can face drought, landslides, earthquakes, and storm surges, floods accounts for the vast majority of its damages. Malaysia is also particularly vulnerable to vector-borne diseases due to its climate. (World Bank, 2022)

Education Sector

No relevant instruments .

Health Sector

Malaysia's NDC identifies improving public health resilience as a key adaptation strategy. It includes the expansion of public health management of future climate risks, disease management that adopt new models using climatic data to predict changes and impacts, improvement of early warning and surveillance systems to improve preparedness and increasing the adaptive capacity of critical healthcare facilities. The NDC does not include more specific actions, assign responsibilities, or identify timeframes.

Other key national directives reference disaster preparedness but not climate change. The Country Health Plan identifies a supporting goal to manage crisis and disasters effectively. However, besides indicating a need to revise existing programming and organizational structures with the changing scope and disease patterns in the future, it does not expand on disaster preparedness. The National Disaster Management Agency Directive No. 20 allocates roles and responsibilities for disaster management and relief. It assigns responsibility for health services and the control of infectious diseases to the Medical Depot Service, and the Malaysia Red Crescent Society has a role in emergency medical assistance providing first aid and health care at evacuation centres.

Social Protection and Jobs Sector

No relevant instruments .

Early Childhood Development Sector

No relevant instruments .

Mongolia

Mongolia is a landlocked country in East Asia, characterized by unique ecosystems and cultures. In Mongolia, storms, dust storms, windstorms, thunderstorms, and snowstorms are common. Droughts are a periodic natural hazard in Mongolia, having a detrimental impact on the economy, agriculture, and livestock sectors, as well as poverty reduction initiatives. Dzuds (very harsh winters) are common in Mongolia,

negatively impacting agriculture and animal sectors, impeding poverty reduction efforts, causing economic shock, and contributing to urban migration. (World Bank, 2022)

Education Sector

The only reference to the education sector in the NDC relates to reducing vulnerability to climate change by increasing employment by providing knowledge and education. This could be strengthened by referencing structural, political, economic and social challenges that could be barriers for vulnerable groups accessing employment and identifying actions to overcome these broader needs.

Mongolia's key legislative instrument, the Law on Education, also lacks reference to climate change. It does point to the need for sectoral collaboration in terms of assisting child and adult learning through activities related to socio-economic sector, science and technology and environment.

Health Sector

Within Mongolia's NDC, public health is identified as a key adaptation theme. The key goal is to strengthen healthcare services and capacities for early warning and the provision of proactive response measures. This involves the assessment of risks and impacts of climate change on the sector, building knowledge and awareness, empower the public to adopt proactive behaviors, and strengthening health institution capacity to respond to health risks.

The national Law on Health does not make reference to climate change, disasters or resilience. The scope of the law refers to preventing adverse effects on human life, health and environment. There is a missed opportunity within the law to recognize the relationship between climate change and human health and wellbeing, and the important role of the health sector in mitigating risks.

Social Protection and Jobs Sector

Mongolia's NDC includes an adaptation goal for livelihood and social safeguarding to establish a system to provide social safeguarding, insurance and prevention measures to reduce vulnerability and increase resilience to climate change impacts. This is planned to be achieved by identifying vulnerable groups, diversifying economic activities, increasing income, expanding income sources and supporting sustainable livelihoods, and providing education.

Early Childhood Development Sector

Within Mongolia's Law on the Protection of the Rights of the Child, reference is made to social care and assistance for the children in especially difficult and difficult circumstances. This includes circumstances related to natural disaster. This could potentially be expanded to reference climate change impacts and the consideration of future changes that could impact on the sector.

Myanmar

Myanmar is situated on the western edge of Southeast Asia. Myanmar is vulnerable to a wide range of natural hazards, including high temperatures, drought, cyclones, flooding and storm surge, and excessive rains. Drought is characterized as the country's most serious natural hazard due to the effects it has on health, property, assets, and livelihoods. Agriculture, water resources, public health, forestry, coastal zones, and biodiversity have been recognized as the most vulnerable sectors to climate change in Myanmar. (World Bank, 2022)

Education Sector

Within the NDC education, along with science and technology are identified as a priority sector. It recognizes that a sound climate knowledge base and access to education are prerequisites for Myanmar to become more resilient. This will mainly be achieved by capacity building of the educator to integrate principles into the curricula at primary, secondary and tertiary levels, of academics and researchers, and institutional capacity and partnerships to access and manage climate finance. This aligns with the Myanmar Climate Change Strategy (CCS) and Master Plan (CCMP) 2018 – 2030 sector specific outcome for education, science and technology which prioritizes investment in all levels of formal education to improve research and innovation capacity, professional development and training, and awareness-raising. The CCS acknowledges that the integration between climate and education policy could be strengthened, where policies to enhance education have a limited focus on climate change, and climate policies have not prioritized education. It suggests that there is a lack of capacity to integrate climate change into formal and informal education systems, and awareness among public, technical service providers and government agencies is limited. The implementation of the strategy is supported by the activities identified in the CCMP along with sectoral outcomes and indicators, as well as linking to relevant SDGs, identifying stakeholder functions, and timeframes.

The two key legislative instruments, National Education Law and Law on Disaster Management do not explicitly mention climate change, however, have relevance due to their referencing of disaster risk. The National Education Law, refers to the provision

of special education services, such as temporary emergency schools, in border areas with conflict, less developed areas, areas with poor transportation, and regions affected by natural disasters. Within the Law on Disaster Management, education is included in one of the law's objectives related to the provision of education programmes to improve living conditions for disaster victims, and the implementation of recovery works to resume education following a disaster. In addition, the National Environmental Policy aims to promote environmental education, public awareness raising and research to enhance understanding of environmental challenges and commitment to sustainable development.

Health Sector

Myanmar's key climate related regulations and strategies acknowledges the climate risk posed to health and wellbeing and recognizes the need to strengthen the health systems and disaster risk reduction to be more climate responsive. They acknowledge the increased risk from climate change on health including from new diseases, heat stress and heightened risk of disasters.

Within the NDC, prioritized needs for disaster risk reduction related to the health sector include improvement of forecasting and early warning systems, improving disaster preparedness and health service responses. Specific interventions to improve health service responses are included such as responses to meet nutritional needs, adaptation planning to mainstream climate change into national health policy, reducing vulnerability to climate-induced water-related health hazards, and supporting hospitals to treat heat-related disorders and improving the capacity to treat emerging diseases. The NDC also acknowledges the need for additional financial support for the health sector to implement Climate Change Master plans.

The National Climate Change Policy (NCCP) acknowledges that health risks and vulnerabilities are rising from climate change impacts, and the need for sustainable resource extraction consistent with climate change mitigation and adaptation priorities in order to protect public health. The Climate Change Strategy (CCS) and Master Plan (CCMP) are the operational instruments of the NCCP. They identify the health sector as one of the key sectors that contribute to current and planned economic and social development, and connect climate change and health to social protection and disaster risk management. The documents' responses align with other relevant policies and plans. The response actions identified for the health sector include strengthening policy initiatives on disaster risk reduction, health and social protection, information and awareness, resources for community preparedness, developing climate resilience infrastructure and systems. The CCMP provides greater detail on the actions in order

to achieve the general outcomes of the CCS including specific actions, timeframes, identifying stakeholder functions and responsibilities, indicators and outputs providing the structure for implementation. While referencing health, some of these actions and activities identified in the documents are generalized and can apply to most sectors and are not only specific to health. This creates an opportunity for collaboration between sectors in the implementation to ensure alignment of activities and outcomes.

While Myanmar's Environmental Conservation Law does not explicitly link health and climate change, it does stress the need for the protection of public health from the emission of environmental hazardous substances, pollutants or wastes, and the conservation of natural and cultural heritage. The Law on Disaster Management acknowledges the importance of natural disaster preparation; however, it only links the need for preparatory works for increasing climate related disasters to the need for public capacity building. In relation to health, it considers the need for disaster recovery processes to improve health and social needs, preparedness for health sector recovery and the provision of healthcare during disaster response.

Social Protection and Jobs Sector

Within the NDC, social protection mechanisms are referred to in relation to the need for shock responsive social protection for effective disaster response, and is also linked with climate risk management to help secure and sustain Myanmar's social and economic development. Under the health sector outcome, it also refers to the need to minimize risks and impacts to people's health and wellbeing by improving social protection and considering gender.

Various social protection mechanisms are established under Myanmar legislative instruments. Many of these are targeted at specific categories of the population and to specific geographic areas. For instance, the Social Security Law makes provisions for a Family Assistance Insurance System for emergency relief following natural disaster, including the provision of health care, relief materials and cash assistance.

The Myanmar Social Protection Strategic Plan addresses the key dimensions of protective, preventative, promotive and transformative social protection. The preventative dimension is focused on preventing risks and shocks, also highlighting the need for effective mechanisms to help communities to prepare, respond to and recover from disasters and emergencies, including those as a result of climate change. Improving the social protection mechanisms related to disaster risk management are a core theme of the strategy. The strategy details interventions to improve the

country's social protection mechanisms, including timeframes, responsible agencies, and indicators.

Early Childhood Development Sector

No relevant documents.

Philippines

Philippines is an archipelago comprised of 7,107 islands (1,000 of which are inhabited), with a humid climate and a topography characterized by mountainous terrain bordered by narrow coastal plains. Philippines is considered to be among the most disaster-prone countries in East Asia. Floods, droughts, typhoons, landslides and mudslides, earthquakes, and volcanic eruptions are examples of risks that frequently occur. Damage-causing extreme events, like flooding and tropical storm activity, have increased over the past few decades, and this trend is anticipated to continue as a result of a changing climate. (World Bank, 2022)

Education Sector

The Philippine's NDC recognizes the importance of traditional knowledge, education and public awareness associated with climate mitigation actions. There is no additional detail within the NDC related to how the country will "institute a multi-level mechanism" regarding this, however, it does provide this commitment within the NDC.

Philippine's key education legislation does not explicitly acknowledge the need to address climate change within the sector. However, the Enhanced Basic Education Act acknowledges the need to broaden educational goals within the rapidly changing and increasingly globalized environment. The other key legislative instrument, the National Environmental Awareness and Education Act, expands on environmental protection through the delivery of environmental education in the context of sustainable development. It encompasses concepts and principles related to threats of environmental degradation and the responsibility of citizens in protecting the environment. It also specifies environmental education requirements as part of the national service training program and responsibilities of agencies to ensure all students receive science-based information on environmental issues.

Health Sector

The NDC identifies the health sector as a key sector for adaptation measures to preempt, reduce and address residual loss and damage, however, it doesn't provide further detail on how this will be achieved.

The National Framework Strategy on Climate Change 2010-2022 (NFSCC) identifies the health sector as being vulnerable to climate change, including increasing endemic morbidity and mortality, and the exacerbation of vector and water borne diseases. It recognizes that the health sector is left to handle the management of the consequences of diseases, disabilities, and deaths as a result of climate hazards. Within the strategy there are three priorities identified for the health sector, which are to undertake an assessment of the vulnerability of the sector to climate change, improve climate-sensitivity and responsiveness, and improve the surveillance and emergency response to disease.

Building on the NFSCC, the National Climate Change Adaptation in Health (CCAH) Strategic Plan 2014-2016 set out to improve the adaptive capacity of the health care delivery system, enhance mitigation and adaptation efforts, and empower communities. It outlines seven (7) strategies and 16 key result areas, detailing implementation timeframes, specific responsibilities, indicators, and budget requirements. Responsibilities were assigned to all three levels of government and describes the functions of various agencies and partners. The plan was also the driver for 14 Centers for Health and Development to develop their own action plans.

Social Protection and Jobs Sector

Philippine Green Jobs Act of 2016 promotes climate change mitigation practices through the creation of green jobs. Green jobs contribute to preserving or restoring the quality of the environment, as well as respecting the rights of workers, delivering fair incomes and providing security and social protection to families. It acknowledges that appropriate standards are required for the assessment and certification of green goods, services and technologies for the purpose of regulating incentives.

Early Childhood Development Sector

No relevant documents.

Republic of Korea

The Republic of Korea borders to the west with the People's Republic of China, and the East Sea and Korean Straits to the east and south with Japan. The impacts of climate change in Republic of Korea can be seen in different areas, including weather, ecology, environment, and water resources, and it varies location to location. To mitigate the effects of climate change, the Republic of Korea is focusing initially on prevention. (World Bank, 2022)

Education Sector

The Environmental Education Promotion Act, purpose is to contribute to the sustainable development of the State and local communities. This also includes the formulation of policies and activities to support improvement of the private sector's operations, and that the people of the nation are active participants in environmental conservation and sustainable development.

Health Sector

The health sector is identified as one (1) of six (6) key sectors incorporated into the Republic of Korea's NDC to improve climate resilience. For this sector it aims to develop a prevention system against health damages associated with climate change. It dictates that each sector will have an annual plan established by the Government in order to achieve the NDC outcomes.

Social Protection and Jobs Sector

No relevant documents.

Early Childhood Development Sector

No relevant documents.

Gender Sector

Gender Impact Analysis and Assessment Act provides a mechanism for the improvement of a policy through the integration of gender considerations following from a gender impact analysis and assessment.

Thailand

Thailand is a Southeast Asian country. Myanmar shares a western border, Laos shares a northern border, Cambodia shares an eastern border and Malaysia shares a southern border with Thailand. It is separated into five sections: Central, North, Northeast, East, and South. Thailand is vulnerable to different natural hazards, including floods, tsunamis, storms, droughts, landslides, forest fires, and diseases. Thailand regularly faces droughts and flood events. In addition, there is a little risk from cyclones in the northern regions of the nation. (World Bank, 2022)

Education Sector

Key laws on national education, as well as non-formal and informal education, acknowledge the importance of environmental education for national development. In addition, the Enhancement and Conservation of National Environmental Quality Act

facilitates the integration of environmental education through a National Environment Board with representation from the Minister of Education.

The Climate Change Master Plan 2015-2050 (CCMP) recognizes the important role of the education sector in achieving the goals of the plan. It identifies raising climate change awareness and increasing adaptive capacity are key to creating an enabling environment for climate change management. This focus aims to enable the accurate policy assessment and to prevent and mitigate climate change impacts. The plan highlights the role of academic and educational institutions, media, government and business sector in achieving these goals. Actions related to the education sector include the application of research into policy planning processes, incorporating climate change into the curricula at school and university levels, capacity development, development of human resources development plans, educating consumers and promoting sustainable products, and encouraging public-private partnerships.

Health Sector

Under Thailand's NDC, one of the key prioritized adaptation efforts is to increase capacity to manage climate-related health impacts. This includes through the development of health surveillance and early warning systems, climate risk assessment, and disease prevention and response measures. The NDC acknowledges that the prioritized actions are all essential to build Thailand's resilience to climate impacts. The NDC itself does not include specific details on implementation, it does address the need for improved stakeholder capacity development, the allocation of adequate financial resources, and planning.

Key health and environmental quality legislation, does not explicitly reference climate change, however, they do both recognize the importance of a healthy environment to the health of people. This includes the right to protection from the discharge of pollution to the environment that might cause poisonous or harmful impacts to health and hygiene of the public.

The Thai Government legislated the requirement of all government departments and agencies to apply the National Strategic Plan on Climate Change for planning. The Climate Change Master Plan 2015-2050 (CCMP) reinforces this requirement as a framework for long term planning within these government departments and agencies. The CCMP recognizes the connections of climate change and development and the need for continuous review to ensure alignment of different sectoral policies, goals, approaches and measures. Within it, the health sector is identified as a high-priority sector, due to rising temperatures and rainfall in many areas of Thailand and

the impact on vector-borne and water-borne diseases. The long-term goals related to the health sector include decreasing malnutrition in children, increasing disease surveillance and decreasing per capita healthcare costs associated with climate change.

Further strategic direction related to health and climate change is provided by the Climate Change and Public Health Strategic Plan 2015-2020. Key strategies of the plan include distributing knowledge, increasing public preparation of coping with health impacts, increasing cooperation with the sector, improving surveillance and warning systems, and advocating to reduce greenhouse gas emissions and facilitate community prevention and minimization of climate impacts.

Social Protection and Jobs Sector

Thailand's Social Security Act sets out legislation related to a Social Security Fund which is used to provide benefits to insured persons. Mandatory contributions to the fund are from the government, employers and individuals. The Act provides provisions for the government to reduce the employers' and insured persons' contributions to the fund in the event of a serious disaster. The impact of such measures on the economy and the stability of the fund are taken into account in the decision-making process. This is a short-term measure, with a reduction only granted for a period less than six months each time.

Early Childhood Development Sector

No relevant instruments.

Viet Nam

Vietnam is a Southeast Asian country with an extensive coastline and diverse but generally warm climate including temperate and tropical regions. Vietnam is the country with the highest exposure to all types of flooding, including riverine, flash, and coastal flooding. Additionally, Vietnam is highly vulnerable to tropical cyclones and the associated risk. Despite a minor decrease, there is still a major risk of drought, as the devastating drought of 2015–2017 has shown. (World Bank, 2022)

Education Sector

Vietnam's NDC specifies that the education sector is at high risk to climate change impacts due to their high exposure and sensitivity to natural disasters and climate extremes. Adaptation actions include raising awareness through education and information dissemination to respond to climate change in different sectors, in community-based disaster risk management and natural disasters. Specific adaptation

actions related to schools include deploying a safety framework to improve natural disaster prevention and mitigation and enhancing education on natural disaster prevention and control. Public awareness for climate change adaptation and mitigation.

Under the Law on Natural Disaster Prevention and Control, natural disaster prevention and control funds are allocated to support the repair of schools. The legislation also requires that the construction in natural disaster-prone areas need to consider the use of these spaces for people's evacuation and as emergency stations providing first aid. The Law also provides policies to raise the public's involvement in natural disaster prevention and control through training and education. This includes increasing knowledge about the impacts of natural disasters, the responsibilities of organizations and individuals, and measures to prevent and control natural disasters. Responsibilities are assigned to the Ministry of Education and Training, Ministry of Information and Communications, and Ministry of Agriculture and Rural Development.

Vietnam's key legislative instruments related to education, the Law on Education and the Law on Higher Education, while not specifically referring to climate change, do acknowledge the role of students in environmental protection activities.

Health Sector

Vietnam's NDC acknowledges the potential impacts on public health from climate change. The NDC does state that adaptation measures to minimize damages caused by future climate change impacts on public health are identified. However, there is no additional information specifically included. The NDC notes that the health sector has low levels of mitigation contribution, however, it does refer to mitigation measures on health care service infrastructure such as energy-saving and energy efficiency.

Within the Law on Natural Disaster Prevention and Control, natural disaster prevention and control funds are identified to support the repair of health establishments. The legislation also requires that the construction in natural disaster-prone areas need to consider the use of these spaces for people's evacuation and as emergency stations. The Ministry of Health is assigned responsibility for emergency provision of medicines, medical equipment and first aid before, during and after natural disasters.

Law on Environmental Protection provides statutory provisions for the protection of the environment, which includes those factors that can affect human health and cause human diseases. It includes the management of project risks posed to the environment and community health. This law includes a specific chapter on response to climate

change, assigning responsibilities and requiring that all environmental protection activities should consider climate change response. While it doesn't explicitly connect human health with climate change, this is done throughout the legislative instrument when linking environmental protection more generally. In regard to the implementation of the law enforcement on environmental protection in the areas of health, food hygiene safety, water source management, waste management and pollution, the responsibility is assigned to the Minister of Health, along with coordination with the Minister of Natural Resources and Environment, heads of ministerial bodies and People's Committees.

Plan for People's Health Protection, Care and Promotion recognizes the challenge faced to the health sector from climate change and disaster risks. It also acknowledges that there are currently unmet needs for reproductive care services and family planning services for those people affected by natural disasters. Related objectives include the implementation of universal health coverage, improving the service delivery network, effective health human resources, increasing public expenditure on health, and ensuring sufficient supply of medicines. Within the plan, there is an opportunity to strengthen the linkage between the objectives and climate change and disaster risk by specifically addressing these issues and needs of the community.

Social Protection and Jobs Sector

Within Vietnam's Law on Occupational Safety and Health there is no direct reference to climate change or disaster risk management, however the scope does include environmental pollution in the workplace. It aims to minimize harm to workers and prevent and combat occupational diseases, including requirements for environmental monitoring.

Early Childhood Development Sector

The NDC makes reference to child protection as an area that needs to be considered in relation to the impact of climate change. The further integration of child protection considerations is not explicitly stated in the NDC.

The Law on Children is Vietnam's key legislation related to the rights of children. This includes the right to be protected while suffering from natural disasters or environmental pollution, and the right to all forms of special assistance.

The Pacific:

Fiji

Fiji has a high exposure to various climate risks such as flooding and tropical storms. Drought exposure is also significant. Climate change and its related issues in Fiji would exacerbate the impacts of these risks on human development sectors, socio-economic systems, and livelihood.

Education Sector

The types of the documents that address climate risks in the education sector are primarily strategies and plans, rather than laws or acts. Education Sector strategic plans developed by Ministry of Education, Heritage and Arts have proposed actions to address climate risks facing the Education sector namely: "(1) increase awareness on Education in Emergencies Programmes & Disaster Management Programs (2) schools need to be developed with standard infrastructure and facilities that are inclusive, Occupational Health and Safety (OHS) compliant and safe from natural and man-made disasters, external pressures and other risks"

The National Adaptation Plan (2018-2023) lists out priority actions to address possible climate risks in the Education sector, such as "(1) regularly update and support delivery of primary, secondary, tertiary, and vocational education curricula that allow and encourage students to participate in research and risk reduction activities in their local area and (2) Review and update and enhance support to non-formal education programs and training materials to incorporate climate change and disaster risk information where appropriate in a way that encourages and supports individuals to undertake risk-reduction activities". One of the strategies included in the national climate change policy is the development of curricula and capacity building programs which respond to new employer competency requirements and desired skill sets that further support the development of a climate ready workforce. Some of the most common actions suggested in the documents are:

- Develop schools with standard infrastructure and facilities that are safe from climate induced disasters
- Incorporate information on climate change mitigation and adaptation in primary, secondary, tertiary, and vocational education curricula.

A majority of the actions presented in the documents aim to advance climate change adaptation. These actions/interventions are financed by external donor agencies and via national budgets of the respective countries.

Some of the gaps observed in this sector are:

- There are no policies and plans developed focusing on particular climate risks, such as school safety against flood risk.
- The documents do not specify what type of climate risk is affecting the Education sector most.

Health Sector

Fiji has an approved national Climate Change and Health Strategic Action Plan 2016–2020 developed by the Ministry of Health and Medical Services. The Plan follows the ten components (Leadership and governance, Health workforce, Vulnerability, capacity and adaptation assessment, Integrated risk monitoring and early warning, Health and climate research, Climate resilient and sustainable technologies and infrastructure, Management of environmental determinants of health, Climate-informed health programs, Emergency preparedness and management, climate and health financing) used by WHO in its operational framework on building climate resilient health systems. A list of activities is proposed under each component to ensure mainstreaming of climate change health impacts. Some of the salient activities listed are “(1) Identification of communities most vulnerable to climate variability and change and associated health risk exposures through profiling or use of existing data and (2) Undertake on-going research with relevant experts to determine the sensitivity of health determinants including water, sanitation and hygiene (WASH); NCDs, including psycho-social illnesses to climate variability and change”

The Strategic Plan of the Ministry also addresses public health emergencies caused by climate induced disasters. The Fiji Ministry of Health has been working to increase its capacity to monitor, assess and respond to hydro-meteorological disasters and climate sensitive diseases to reduce the health risks associated with climate change.

The National Adaptation Plan lists down 10 adaptation actions for health sector in tackling the negative impacts of climate change and increasing adaptive capacity. Some salient actions are “(1) Improve case detection and coordinated response to reduce communicable disease morbidity and mortality through strengthened partnership and cooperation within the Ministry of Health and Medical Services (MOHMS) and between the relevant ministries and stakeholders (Fiji Meteorology Services); (2) Retrofit the existing and installing innovative structures, energy and water supplies; medicines and equipment efficiency to prevent vulnerability to CC impacts. Some of the climate sensitive diseases listed in the document are dengue, diarrhea, typhoid, leptospirosis.

Most of the actions proposed in the documents can be categorized as adaptation measures. One of the Fiji's 2015 NDC mitigation targets is to build strong healthcare system by implementing the 'Guidelines for climate-resilient and environmentally sustainable health care facilities in Fiji'.

One deficiency observed herein is that there is no policy/plan developed describing the effects of air pollution on health and the actions needed for mitigation/adaptation.

Social Protection and Jobs Sector

Fiji National Employment Policy 2018 has proposed priority actions for the creation of decent work and quality jobs in the context of climate change by identifying and promoting green jobs and new green skill sets. The Policy proposes the analysis of current and planned investments by governments, donors, and the private sector to gain better information about new green jobs or green skills sets needed for occupations; elaboration of new environmental policies to support development of green job skills strategies for implementation and the review of education and training curricula related to green skills should be reviewed periodically. Fiji low emission development strategy Proposes to foster green employment the Fijian Government will support mechanisms for building skills and accessing information, markets, and finance. This includes development of ICT services for all sectors which has potential, in itself, to reduce emissions, and also include sustainable resource management and use and adaption to climate change (such as choice of climate-resilient crops).

Climate change and disaster risk management documents too highlight actions relevant for social protection. For example, Fiji Climate change act refers to climate displacement and relocation and establishes the Fijian Taskforce on the Relocation and Displacement of Communities Vulnerable to the Impacts of Climate Change. Climate relocation of communities' trust fund act 2019 establishes a trust fund for the planned relocation of communities in Fiji that are adversely affected by Climate Change.

One of the gaps observed herein is that there are no policies and plans developed focusing on particular climate risk.

Early Childhood Development Sector

No relevant instrument.

Kiribati

Kiribati experiences risks from climate change similar to other nations in the Pacific. Some of the climate risks that cause impact on human development sectors are heat wave and drought, intensified cyclones, saline intrusion, wave-driven flooding, and permanent inundation.

Education Sector

Kiribati's overarching Climate Change Policy identifies capacity building and education as a key national priority for climate change adaptation, mitigation and disaster risk reduction. It identifies the need for increased awareness and capacity programs for all priority sectors. This will be delivered through two objectives that aim to provide accurate and contextualized information to integrate with the national curriculums (primary, secondary and tertiary levels) and increasing formal and informal capacity building programs to increase the adaptive capacity of Kiribati's communities. The policy also recognizes that rural communities are more vulnerable to the impacts of climate change due to limited access to employment, transport, communication, education and health services.

There are two relevant national level plans that support the delivery of climate change adaptation activities in the education sector. The Kiribati Joint Implementation Plan 2014-2023 is an integrated plan which prioritizes climate adaptation and disaster risk reduction actions. Actions in the plan also reflects the intent of the objectives of the Climate Change Policy. One key strategy of the plan is to deliver appropriate education, training and awareness programmes. The priorities within this are that students and professionals have capacities to take action on adaptation and risk reduction, including having appropriate coping strategies before, during and after disasters, and that the population has access to up to date and accurate information to enable voluntary action to reduce risks. In addition, the plan aims to ensure that the Kiribati population is qualified with formal, technical and vocational education to improve employability outside of the country.

Climate change adaptation and mitigation are considered within the vision and goals of the Education Sector Strategic Plan 2012-2015. It incorporates outcomes from a National climate change summit. The plan attempts to support young people and adults to adapt to changes in their livelihoods that increase their vulnerability to climate change risks. One avenue to achieve this is considered to be the provision of a conducive teaching and learning environment in schools through access to safe, healthy buildings and facilities.

Health Sector

The National Sanitation Policy addresses the impacts of climate change and variability on sanitation in Kiribati to enhance the resilience of the system. Strategies to

implement the policy include assessing the implications of climate change on sanitation and the environment as a consequence of their management, developing building code requirements for sanitary fixtures and fittings, and support regional and international projects aimed to improve sanitation and protect groundwater pollution.

Kiribati's overarching Climate Change Policy identifies the health sector as a key national priority for climate change adaptation, mitigation and disaster risk reduction. It acknowledges that without a targeted strategy for the health sector to address climate change and disaster impacts, health services will continue to be overwhelmed, impacting on people's health security. The Policy contains six objectives aiming to improve the health sector's resilience. They focus on the development of a governance framework, improved management and coordination of health programs, improve the capacity of national and local health systems, institutions and personnel, retrofit medical facilities and infrastructure, and improve waste management.

There are three key plans delivering a more resilient health sector, aligning to national policies. Within the Kiribati Joint Implementation Plan, a key national adaptation strategy is to strengthen the health service delivery to address climate change impacts. This includes public awareness of water safety in relation to vector and food borne diseases, improved surveillance of environmental health hazards, strengthening health intervention programs, improved capacity of the health sector, sectoral frameworks and plans, improving the resilience of health infrastructure. National Climate Change and Health Action Plan describes the specific health risks posed by climate change in Kiribati. It recommends priority areas for climate change and health planning and adaptation as water safety and water-borne diseases, food safety and food-borne diseases and vector borne diseases. Adaptation strategies include improving monitoring and surveillance and capacity building for health sector staff. At the sectoral level, the Kiribati Health Strategic Plan 2016-2019 considers climate change risk through initiatives and taking a multi-sector approach to climate change adaptation planning.

Social Protection and Jobs Sector

The Kiribati Joint Implementation Plan 2014-2023 includes two key strategies related to social protection and jobs. Firstly, the strategy aims to strengthen and green the private sector, including a specific focus on small businesses, by the implementation of greening and risk management initiatives in areas such as fisheries, tourism, trade, transport, import and export, and the incorporation of climate change and disaster risks into planning processes. The second key strategy relates to improving water and food security to improve climate resilience and to promote a healthy and resilient environment. Actions relate to improving institutional capacity for sustainable resource use, effective enforcement of environmental protection mechanisms, promotion of

sustainable food systems, and increasing community knowledge. The plan identifies several lead agencies, supporting agencies and partners as responsible for the implementation of the actions.

Early Childhood Development Sector

No relevant instrument.

Gender Sector

The National Policy on Gender Equality and Women's Development aims to mainstream gender into government policy. It recognizes the importance of considering climate change risks and how women and men might be affected differently. It prioritizes progressive gender mainstreaming to ensure both women and men have access to support for climate resilience, and increasing women's political participation and leadership so that women have the capacity to articulate their needs with respect to climate change.

The Kiribati Joint Implementation Plan 2014-2023 recognizes the importance of integration of gender, and highlights that all of the strategies and actions within the plan are inclusive of vulnerable groups considering gender, youth, elderly and people with disabilities. It acknowledges that low levels of budget allocation in development strategies affect the integration of climate change, disaster risk management and gender considerations. It specifically aims to ensure that all emergency and disaster management initiatives are gender responsive through the gender sensitivity training, and promotes the equal participation of women and men in climate change and disaster management initiatives by the development of a gender sensitivity toolkit.

Marshall Islands

The Republic of the Marshall Islands' (RMI) island groups faces various climate risks such as cyclones, heat waves and flooding. Moreover, RMI experience a potential long-term threat from permanent inundation and wave-driven flooding.

Education Sector

The education sector is broadly identified and considered in the National Climate Change Policy Framework and the 2050 Climate Strategy. A key policy goal is identified as education and awareness, as well as community mobilization, with consideration of culture, gender and youth. The Policy Framework acknowledges the importance of the sector in underpinning the implementation of the policy and in the development of adaptation actions. Key outcomes for the sector are identified as improved technical and scientific capacities, increased discourse on climate change, awareness on impacts, and adaptation planning that reflects climate change information, traditional knowledge and science for decision-making. The 2050 Climate Strategy highlights the

need to integrate education, training and public awareness into the National Adaptation Plan as the key strategy linked to the education sector. This includes increasing understanding of climate-related issues, waste and recycling, encouraging low-carbon modes of transportation such as walking and cycling,

The importance of education and public awareness is also reflected in the Joint National Action Plan for Climate Change Adaptation & Disaster Risk Management. This includes the development of human resources, the development of a communications strategy, climate change and disaster risk management education and awareness in the formal education system, and informing and training the public about emergency response procedures, with a priority on vulnerable groups.

Health Sector

National Climate Change Policy Framework which sets out the Government's strategic priorities to address climate change. The health sector is identified as one of the priority sectors that has been identified as needing strengthening in order to increase the country's capacity to adapt. The policy acknowledges that the country, and its population are already experiencing the health impacts of climate change. This document sets the direction for consideration of the health sector in both the 2050 Climate Strategy and the Joint National Action Plan for Climate Change Adaptation and Disaster Risk Management for the country. Within the Joint National Action Plan, a goal to enhance local livelihoods and community resilience aligns with the broader health and wellbeing priorities. This includes community awareness raising campaigns around water, pollution, public health, food security, disaster risk reduction and climate change, and strengthening the institutional capacity of the health sector. The plan also identifies the importance of increasing the understanding of the potential impacts on health from climate change in order to better adapt. The Climate Strategy also highlights health as an important sector, highlighting that it is critical that the country takes steps to increase the adaptive capacity and resilience of its health system. It acknowledges that further information is required in order for this to occur, with the key activity in relation to this is to undertake relevant studies to better identify potential health impacts.

Social Protection and Jobs Sector

The 2050 Climate Strategy articulates the need for adaptation pathways that will need to consider food and water security, community and household resilience building, and the development of financial mechanisms to finance investments for response and recovery efforts. The Strategy also acknowledges that with increasing impacts of climate change, including flooding and inundation, the government may need to develop a policy to consolidate the population into elevated settlements. With this,

the Strategy acknowledges that there will be a need to ensure the rights of citizens to remain on the islands, and also ensure the continued opportunity for migration for those who choose to relocate. The strategy does not offer solutions as to how this could be achieved, it poses several critical issues that need to be addressed.

Early Childhood Development Sector

No relevant instrument.

Gender Sector

National Climate Change Policy Framework highlights the opportunity to promote gender specific and gender sensitive climate adaptation responses, including the integration of traditional knowledge. Gender considerations are highlighted also in a general sense as being important in underpinning the framework as a whole. 2050 Climate Strategy highlights the need to mainstream gender considerations and human rights-based approaches in all aspects of the country's policy and legislative development. It provides several opportunities to enable this gender mainstreaming. This also extends to the recommendation related to the development of the NDC and the commitment to integrating this approach in all NDC related planning, programming and implementation. The strategy also suggests that women, men and youth should be included in identifying and addressing the climate change concerns of their communities, and in sharing knowledge for strengthening resilience.

These policy recommendations are also reflected in the National Gender Mainstreaming Policy of the Republic of the Marshall Islands. The policy aligns to the climate specific policies by acknowledging the role of women and men in climate adaptation, and the value of local knowledge in this planning.

Micronesia

The Federated States of Micronesia (FSM) experiences extreme heat, intensified cyclones and extreme rainfall as the most common climate risks. The country faces a biggest threat from the loss of some species of fish which impacts greatly on the livelihood of the population

Education Sector

The Nationwide Integrated Disaster Risk Management and Climate Change Policy is the key national policy to proactively integrate the management of disaster and climate related hazards by investing in risk management, mitigation and adaptation measures. The Climate Change Act implements this policy; however, it does not contain specific actions for the education sector. However, the Department of Education is assigned responsibility to prepare policies and plans on climate change that are consistent with the climate change policy.

Education sector strategic development plan (2020-2024) addresses both disaster risk reduction and climate change adaptation in its proposed activities. This includes ensuring effective school-based disaster risk reduction policies are in place and budgeted for, and considering vulnerabilities, on-going strategic planning, consideration of weather patterns in scheduling, ensuring remote and isolated communities have reliable IT access, and ensuring training venues consider power reliability.

Health Sector

The Nationwide Integrated Disaster Risk Management and Climate Change Policy includes two strategic outcomes related to reducing the occurrence of epidemics and other health hazards, and improving the resilience and health of the population, including the use of special protection measures for vulnerable groups. The policy does not include specific actions for the health sector, however, the Department of Health, Education and Social Affairs is allocated responsibility for integrating the policy outcomes into their respective policies, plans and operations.

Social Protection and Jobs Sector

Within the Health and Social Protection strategic outcome of the Nationwide Integrated Disaster Risk Management and Climate Change Policy, includes reference to special protection measures for vulnerable groups. The Department of Health, Education and Social Affairs is the responsible agency for consideration of marginalized groups and social vulnerability. While the policy does not provide further detail on the achievement of the sectoral outcome, it does include actions with references to adapting development and economic activities, addressing human mobility, enabling adjustments in human systems to respond to changes, and ensuring safe and secure infrastructure and settlements.

Early Childhood Development Sector

No relevant instruments.

Papua New Guinea

Papua New Guinea experiences flash flooding, sea level rise and heat waves. Extreme heat is a major threat to human health risk in PNG.

Education Sector

The NDC recognizes access to infrastructure services for rural and remote areas has impacted on these communities' access to education, with 28% of young people (15-24 years old) not employed or participating in educational or vocational training opportunities. The NDC also acknowledges that access to education can be a driver

for migration. However, despite this need, the NDC does not offer a focus on education in the mitigation and adaptation measures.

National Climate Compatible Development Management Policy is a key policy to build climate resilience and towards a carbon neutral pathway. It highlights education as a provincial cross sector implementation priority, aiming to promote a climate change literate society. National Disaster Risk Reduction Framework 2017-2030 aligns with the policy. One of the key guiding principles is the promotion of public education and awareness in disaster risk reduction through incorporation into education curricula. It recognizes that this needs to be tailored to the needs and priorities of the provinces and vulnerable communities. Priority actions include understanding disaster losses related to education, undertake training and community of practice, and promote the incorporation of risk knowledge into formal and non-formal education at all levels. In addition, in order to increase community resilience, the framework identifies the need of increasing the resilience of new and existing critical services and infrastructure (including educational facilities) to ensure they remain operational during and after disasters to provide essential services. The framework also details the roles of various stakeholders in support the Government in the implementation of the actions, such as academia, international development partners, business and media.

The National Education Plan 2020-2029, recognizes the importance of creating climate resilient infrastructure, including considering climate change and disaster risk reduction into the design of classrooms. A planned restructure of the education system has been identified as requiring new infrastructure to support the program changes, providing an opportunity to incorporate these design principles into the planning process. In addition, the Quality Education focus area refers to the development of climate change and disaster risk reduction curriculum support materials. It acknowledges that to be achievable this will need to be incorporated into the appropriate sections of the curriculum by teachers.

Health Sector

Papua New Guinea's NDC highlights the health sector as one of the four key development sectors for adaptation planning. This is aligned to the National Adaptation Plan. Specifically, the adaptation priority areas related to health are malaria and vector-borne diseases, and water and sanitation. The NDC highlights that changes in climate have been worsening the effects of malaria, especially into areas where it previously hasn't been present, and that coastal and inland flooding are increasing vector-borne disease risk, and contaminating drinking water. Unsupported actions (those that have yet to be programmed or implemented) include improving environmental health services, increasing access to safe drinking water, improving WASH services, improving water catchments, and using technological approaches.

The National Health Plan acknowledges the importance of climate change through an objective aiming to improve the capacity and preparedness of the health sector to address the impacts of climate change. This includes increasing cross-sectoral collaboration and ensuring every health facility has a Disaster Preparedness Plan which also addresses climate change impacts. The achievement of the plan will also be improved through the implementation of Provincial Health Authority reforms.

National Climate Compatible Development Management Policy highlights the impacts of climate change on public health by identifying it as a key provincial cross-sector priority. In this regard, the key objective for the sector is to promote a climate resilient society from diseases and natural disaster emergencies. It recognizes that to effectively address these impacts, including climate change, requires a multi-disciplinary approach that involves medical and emergency management personnel and community leaders. Priorities involve addressing population vulnerability and conducting health assessment to evaluate climate impacts. It also recognizes the need for alignment between key health policies and climate change policies.

The health sector priority is carried into the National Disaster Risk Reduction Framework 2017-2030. This is recognized in target 4 which aims to reduce the damage to critical infrastructure and the disruption of basic services among health facilities. The protection of health, livelihoods and assets through the management of disaster risk is also a key guiding principle. The cross-cutting nature of the health sector priority is carried throughout the priority actions of the framework.

Social Protection and Jobs Sector

One of the priority areas of the NDC has a focus on the forestry and agriculture sectors and acknowledges the importance of enforcing sustainable livelihoods. This includes actions to strengthen food security and develop a sustainable commercial agriculture sector. Unsupported actions (those that have yet to be programmed or implemented) include the scaling up and replication of smallholder Climate Smart Agriculture.

One of the core policy principles of the National Policy on Social Protection is to increase resilience, in particular of vulnerable and disadvantaged individuals and groups, to respond to socio-economic and environmental shocks. It recognizes that well established, well designed and efficient institutional channels will enable the Government and stakeholders to respond to emergencies in a timely and effective manner. Climate change is specifically included in the policy's framework of vulnerability and risk reduction as a proactive measure for long term adaptation. However, there are no specific actions relevant for climate risks identified in the policy.

The National Climate Compatible Development Management Policy recommends the development of specific climate change adaptation and mitigation policies for the

green-collar jobs sector. This is expected to be achieved through comprehensive planning to shift economic development and training programs to support local jobs in sustainable businesses.

There is no specific reference to social protection or jobs within the National Disaster Risk Reduction Framework. It does consider the need to ensure a focus on disaster risk management and sensitivity to the needs of the vulnerable sections of the population, and to ensure essential services remain operational during and after disasters. Economic resilience is referred throughout the document in relation to disaster risk management and increasing resilience. This also includes ensuring continuity of businesses, including social and economic recovery in the post-disaster phase, and training existing workforce and voluntary workers in disaster response.

Samoa

Samoa faces extreme heat, intensified cyclones and extreme rainfall as the most common climate risks. Climate change has posed many threats on the livelihoods of Samoa population.

Education Sector

The Samoa Climate Change Policy 2020-2030 guides the coordination of climate change adaptation and mitigation between institutions and government. The importance of the education sector in promoting awareness, education and advocacy activities on climate change issues is identified in the policy. There are 6 related strategies which include the promotion of public awareness and campaigns, align to the Environment Sector Community Strategy, encourage research, integrate into formal and non-formal curriculum at all national levels, and capacity development at the community level.

Health Sector

While the health sector is acknowledged in the NDC as being significantly impacted by climate change, it does not include mitigation or adaptation strategies. Rather, the NDC notes that this sector and priority areas are highlighted within the Community Integrated Management Plans and National Climate Change Policy 2020-2030.

The National Adaptation Programme of Action was prepared in 2005, however it identifies the vulnerability of key sectors, including the health sector. Key adaptation activities identified included climate-adaptive health programs, awareness activities and training, early warning systems and emergency measures, and climate-health cooperation program.

The sectoral specific Climate Adaptation Strategy for Health contains strategic recommendations to strengthen the capacity of the health sector to improve risk

management and response to disasters, emergencies and climate change, ensure health concerns are integrated in decisions by other sectors, and increase public awareness. The operational framework of the strategy involves health governance, policy and management, cross-sectoral collaboration and partnership, capacity development, vulnerability and adaptation assessment, and cross-sectoral prevention and risk management. The Ministry of Health is the lead agency for the sector and is the National Focal Point for monitoring the sectoral climate strategy. Since the preparation of the sectoral strategy, the Climate Change Policy 2020-2030 was developed. A key strategy is to enhance the adaptation approach to increase resilience across the area of health. It recommends an adaptation implementation measure to undertake a review of the sectoral adaptation strategies, including the health sector strategy. This would provide an opportunity to assess the strategy implementation and to further embed climate change adaptation into the health sector.

Social Protection and Jobs Sector

Samoa Climate Change Policy 2020-2030 does not specify specific policy directions related to social protection and jobs. More generally, the implementation of the adaptation actions, however, aim to enhance the climate resilience of the communities of Samoa.

The Community Development Sector Plan is focused on supporting communities to lead their own development. It contains an aspirational goal to create green job opportunities and finance to support green jobs.

Early Childhood Development Sector

No relevant instrument.

Solomon Islands

Climate risks to the Solomon Islands have been identified as sea level rise, increase in storm surges and other extreme weather, increase in air and sea surface temperatures, more frequent and intense rainfall events, and less, but more intense and severe cyclones. These risks increase coastal erosion and coastal flooding, impact livelihoods due to damage to agriculture, and cause disruption and damage to essential services.

Education Sector

The NDC recognizes that there is a need for a focus on development knowledge and skill levels to address capacity gaps with regards to climate change and disaster risk reduction. This includes the need to translate climate science and predicted impacts into messages that support public action. The NDC also acknowledges that certain cultural barriers and limited capacity at the community level hampers awareness and action.

Solomon Islands National Climate Change Policy: 2012 - 2017 includes a key policy directive and related strategies about education, awareness and capacity building. It acknowledges the need for the Government, stakeholders and development partners to achieve the policy's goals. The policy aims to support the development of climate change communication strategies, integrate climate change in formal (primary, secondary and tertiary) and non-formal curricula, access capacity needs and train specialized experts, raise people's understanding of climate change and disaster risk reduction, and strengthen information sharing.

In addition, from a strategic sectoral perspective, the Education Strategic Framework 2016 – 2030 acknowledges climate, sustainability and resilience within a key milestone related to awareness of these concepts in the curriculum.

Health Sector

Within the NDC, access to better health care is highlighted as a key enabling factor that will support poverty alleviation. However, the NDC does not include any further mitigation or adaptation measures associated with the sector.

The health sector is acknowledged in the National Climate Change Policy. One key policy directive and strategy is to increase the capacity of health professionals to address adverse impacts of climate on human health.

Social Protection and Jobs Sector

The NDC addresses the need for improved community resilience by including adaptation interventions related to developing a national information system covering livelihood assets (natural, human, financial, social and physical capital) that can identify climate sensitivities and be used in decision making to reduce vulnerabilities.

The National Climate Change Policy contains adaptation policy directive and strategies that acknowledges the need to strengthen social capital. Priorities are to develop an information system to identify sensitivities to climate change, adaptive capacity, and key strategies covering vulnerable groups, as well as implementing community-based programs within a cooperative framework to strengthen social capital, skills and resilience.

Early Childhood Development Sector

No relevant instrument.

Timor-Leste

Timor-Leste has identified the key climate risks, namely, rising sea levels, more extreme weather events, increasing temperatures, especially in the dry season, and changes to ocean temperatures and chemical composition. These increase the risk of flooding to

low-lying coastal villages, increase the risk of fires, cause food storages and impacts livelihoods reliant on agricultural production, and cause access issues to important services for remote communities due to infrastructure damage.

Education Sector

The NDC recognizes that one of the main challenges faced by the country is low education, along with vulnerability to natural hazards and climate change. One key sector identified to increase education and awareness raising is within the agricultural and forest management sector. It also acknowledges the need to build institutional capacity across sectors and departments, as well as providing support for non-governmental institutions in low emissions and climate resilient development planning.

Timor-Leste Strategic Development Plan, 2011-2030 sets a pathway for sustainable and inclusive development. One key short-term action, to be completed by 2015, was to establish a National Climate Change Centre to conduct research and observation on climate change issues. This has been achieved with the establishment of the Center for Climate Change and Biodiversity, established by the Ministry of Commerce, Industry and Environment and the National University of Timor Lorosa'e. Timor-Leste's first National Adaptation Plan includes a medium-term (2023-25) objective to establish climate change programs in tertiary education and professional development programs.

Health Sector

Within Timor-Leste's NDC, the health sector is identified as a priority adaptation area, describing the potential impacts on health and livelihoods from climate change such as increase in vector-borne diseases. Priority adaptation measures include the assessment of sectoral impacts to determine adaptation options, integrating disease surveillance, response and early warning systems, mainstreaming climate change issues into primary health care systems, and establishing a health cluster to prepare and respond for emergency disasters. In regard to the health sector and greenhouse gas mitigation, the NDC also acknowledges that the use of fire and inefficient stoves as household energy sources, not only contributes to emissions, but poses serious public health, socio-economic and environmental consequences for the people.

The National Adaptation Plan aligns with the NDC adaptation priority measures. Key actions of the plan include improving knowledge of climate sensitive health risk and vulnerability information through the development of a health database, and establishing surveillance systems for health early warning and response mechanisms. These priority actions are assigned short-term timeframes for implementation.

The Timor-Leste Strategic Development Plan also recognizes the importance of research, and environmental monitoring. While not specifically referring to climate change, the plan proposes related actions such as building human resource capacity for environmental auditing and pollution monitoring.

Social Protection and Jobs Sector

The NDC recognizes the high rates of unemployment, especially amongst youth, and that there have been many challenges in generating jobs for young people entering the work force. It also acknowledges the potential climate change impacts on water storage and food insecurity. Priority adaptation measures include integrating climate change considerations into integrated agroforestry and watershed management, sustainable land management practices and awareness raising. For water resources, measures include climate proofing water infrastructure, enhancing strategies to respond to drought, creating a water harvesting model, and controlling water use by industry.

Timor-Leste's National Adaptation Plan aligns with the NDC priority adaptation measures. Short-term (2-5 years) priority actions included in the plan are to improve institutional and community capacity to prepare and respond to climate change-induced disasters, and develop alternative livelihood options to increase community resilience. Medium-term actions (5-10 years) include reducing the vulnerability of farmers and pastoralists to increased flood and drought events, integrate water conservation, water use management, and climate risk reduction approaches into customary rules, and climate-proof water source infrastructure.

Early Childhood Development Sector

No relevant instruments.

Tonga

Identified climate change risks to Tonga include rising sea levels, changing rainfall patterns, increase in sea temperatures, and more extreme weather patterns, including increased intensity and frequency of tropical cyclones and storm surges. These risks have the potential to increase health risks from water and vector borne diseases, pollution, and impact livelihoods by affecting the agricultural and fisheries sectors. In addition, these types of risks increase natural hazards that cause direct damage to essential infrastructure, including health and education facilities, and water and sanitation services.

Education Sector

One of the key targets of the Tonga Climate Change Policy is the role the education sector plays in the creation of a resilient Tonga. This includes incorporating education for resilience into the curricula at all levels of primary, secondary and tertiary education, also with a focus on increased response capability.

The Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management expands on the considerations of the Climate Change Policy. Priorities include the improvement of technical knowledge within key government agencies, especially for improved capacity for climate change projection and development planning, increase community awareness, and improve the use of ICT for climate change and disaster risk management information management and decision-making. Specifically related to schools, is the action to increase the capacity in the Ministry of Education to conduct regular drills for schools.

Health Sector

The Environment Management Act 2010 specifically regulates pollution of the air, water or land. It coordinates the role of Government in relation to all environmental management, including climate change issues.

Reference to the health sector in Tonga's Climate Change Policy relates mainly to the intersection of environmental protection and health. This includes a focus on ground water, soil health and coastal environments. Actions relate to the development of monitoring systems and a comprehensive climate early warning system.

The Joint National Action Plan on Climate Change Adaptation and Disaster Risk Management further considers the need to address the impacts on the health sector. Key actions include public awareness programmes on climate change and related diseases, increasing the capacity of social workers on disaster trauma counseling, conducting assessments on vector- and water-borne and nutritional diseases, and strengthening the capacity of health care providers to act as first responders.

Social Protection and Jobs Sector

Two of the three adaptation targets in the NDC relate to increasing the resilience of livelihoods and the jobs sector. The NDC acknowledges that food security is a priority for the population given the country's geographical and economic characteristics. They are generally about increasing the land available for agro-forestry or forestry and maintaining stocks of fish and other marine species. These relate to specific climate change impacts affecting Tonga, increasing temperatures and sea-level rise.

Early Childhood Development Sector

No relevant instruments.

Tuvalu

Increasing temperatures, sea level rise, including tsunami threats, severe weather events, rainfall and sea water acidification have all been identified as key climate change risks to Tuvalu. This includes rainfall that is more intense and frequent, as well as cyclones, and the risk of drought from changes in rainfall patterns and increased temperatures. These risks are predicted to impact on the structural integrity of essential services, including schools and hospitals, reduce agricultural productivity, impacting livelihoods, and increase pressure of basic public services.

Education Sector

Key national legislation, the Environment Protection Act and Climate Change Resilience Act both make reference to the promotion of public awareness and understanding related to climate change. Responsibility for providing education, training and other capacity development opportunities in areas related to mitigating greenhouse gas emissions, building resilience and climate change adaptation is assigned to the Department of Climate Change and Disaster.

This direction is also aligned to the Tuvalu Climate Change Policy. It looks at the need for better climate change awareness in education and increased integration of climate change into the curriculum across all levels of schooling, and increasing awareness, capacity and communication systems throughout the country. The National Strategic Action Plan for Climate Change Adaptation and Disaster Risk Management is driven from, and aligned to, the Climate Change Policy. Actions proposed in the plan are to assess the curriculum at all education levels with a view to incorporating climate change and disaster risk management programs, as well as the provision of study and teaching aids, resource material and training.

Climate change is one of the guiding areas within the Tuvalu Education Sector Plan III. This also includes reference to ensuring that school facilities are structurally safe during disasters, and appropriate school disaster management practices are implemented in each school. Mainstreaming climate change and disaster risk reduction into the curriculum and the provision of materials and resources to support this aim to improve learning resources and human resources in schools.

Health Sector

Driven from the Tuvalu Climate Change Policy, the National Strategic Action Plan for Climate Change Adaptation and Disaster Risk Management 2012-2016 recognizes the need to improve knowledge and information of the implications of climate change on the health sector. The action in the plan for this is to conduct an assessment of health and socio-economic implications of climate change and disaster risks in each island.

Social Protection and Jobs Sector

Climate Change and Disaster Survival Fund Act 2015 legislates the provision of immediate vital services to the people of Tuvalu in the event of natural disasters and climate change. It also allows for improved response to future climate change impacts and disasters in Tuvalu by the Government and its people.

Tuvalu Climate Change Policy highlights the need to strengthen resilience and livelihoods, as well as the need to climate-proof key infrastructure against climate change impacts and disaster risks.

Early Childhood Development Sector

The Early Childhood Care and Education Policy regulates the provision of safe buildings, grounds and equipment. The responsibility to ensure this safety is put onto the Early Childhood Care and Education Management Committees or Kaupule or private providers. The policy does not specifically mention whether or not the safety regulations cover climate risks. This would provide a suitable opportunity to integrate references to climate change risks if not already covered.

One key strategy of the Climate Change Policy is the provision of gender disaggregated data for development planning, and the integration of gender inclusive implications related to climate change and disaster risks informing the adaptation programmes for each island.

Vanuatu

Vanuatu faces climate risks that include rising sea levels, rising sea temperatures, ocean acidification, increase in frequency of extreme weather events (cyclones and storms), increase in dry periods, and increase in frequency and intensity of rainfall. However, the specific climate risks are not necessarily identified in every document. These climate change risks threaten livelihoods by affecting agriculture practices, impact the logistics and management of public services, such as education and health, and increases the occurrence of public health emergencies.

Education Sector

The education sector is considered within the NDC in relation to the youth priority sector. It acknowledges that every child, regardless of climate and disaster circumstances, must be able to access the education system. The NDC also commits to ensuring that all schools incorporate climate risk management activities and commits to reducing the gaps in relation to climate disaster responsiveness of school facilities. It also acknowledges the role of youth in leadership roles in adapting to

climate change, and commits to introducing concepts of sustainable development at the primary level.

The Vanuatu Climate Change and Disaster Risk Reduction Policy integrates aspects of the education sector in the policy actions. This includes incorporating lessons learned following a climate or disaster related impact into the school and informal education programmes, and developing advocacy and educational programmes around ecosystem-based adaptation.

The Vanuatu Education and Training Sector Strategic Plan acknowledges the importance of enhancing community engagement to support schools' access to disaster mitigation and risk reduction. This is proposed to be implemented through strategies to strengthen partnerships, implementing the Education in Emergency Policy, strengthening coordination amongst ministries, and improved data collection and analysis.

Health Sector

The NDC acknowledges the triple health burden (communicable diseases, increasing rates of non-communicable diseases and the effects of climate change) that the country faces. As such, the health sector is identified as a key adaptation priority area in the NDC, with it recognizing that climate change has the potential to impact health service planning and delivery.

Social Protection and Jobs Sector

The NDC acknowledges the high reliance on agriculture as the basis of household incomes and livelihoods, and the need to support household income and food needs in a changing climate. This includes specific commitments for the agricultural, fisheries, forestry and livestock sectors to improve resilience. For the agricultural adaptation priority area it includes 18 commitments and targets related to improving sectoral preparedness, increasing resilience and improving traditional practices, as well as providing adequate funding for activities to address climate change. It also includes a commitment for the development of a national fruit and vegetable support and recovery fund. For the fisheries and livestock sectors, the NDC also acknowledges the need for the sectors to adapt and to address the loss and damage from climate-related disasters. The NDC recognizes that climate change vulnerability significantly impacts the safety, security and availability of water. With limited freshwater available, the NDC has a priority to ensure all people have reliable access to safe drinking water and that climate risk management on water sources is strengthened.

The National Policy on Climate Change and Disaster-Induced Displacement seeks to minimize the divers of displacement and to better understand the population's needs, and to promote access to disaster-resilient housing.

Early Childhood Development Sector

The Early Childhood Care & Education policy incorporates strategies to improve disaster risk management for the early childhood development sector in order to provide secure and safe environments. This includes ensuring disaster response procedures are followed, ensuing child safeguarding policies are followed during disasters, that all children complete disaster drills at least once per term, and that buildings are disaster-proof.



Asian Disaster Preparedness Center

SM Tower, 24th Floor, 979/66-70 Paholyothin Road, Phayathai, Bangkok 10400 Thailand

Tel: +66 2 298 0681-92

Fax: +66 2 298 0012

Email: adpc@adpc.net



www.adpc.net



Asian Disaster Preparedness Center - ADPC



@ADPCnet



Asian Disaster Preparedness Center (ADPC)