

URBANISATION, PEOPLE MOBILITY, AND INCLUSIVE DEVELOPMENT ACROSS URBAN-RURAL CONTINUUM IN ASEAN



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one community



Urbanisation, People Mobility, and Inclusive Development across Urban-Rural Continuum in ASEAN

The ASEAN Secretariat
Jakarta

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This study was made possible through the support of the Kingdom of Norway through the Norwegian-ASEAN Regional Integration Programme (NARIP).

Disclaimer: The findings, analysis, and recommendations of this Report do not represent the official position or views of the ASEAN, ASEAN Member States or any other institution.



H.E. Ekkaphab Phanthavong

Deputy Secretary-General of ASEAN
for ASEAN Socio-Cultural Community

FOREWORD

The “Urbanisation, People Mobility, and Inclusive Development across Urban-Rural Continuum in ASEAN” is a pioneering study that links a multitude of policy issues affecting rural and urban spaces under the broad framework of inclusive and resilient sustainable development. The analysis and recommendations from the report comes at the most opportune time as ASEAN Sectoral Bodies are implementing their respective work plans covering the period 2021 to 2025. With these work plans contributing to the implementation of the ASCC Blueprint 2025, and other ASEAN regional frameworks, as well as, the 2030 Agenda on Sustainable Development, the study gives us a glimpse of a post-2025 ASEAN Vision. The report was endorsed by the Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE), and its development was initiated by the ASEAN Secretariat and in partnership with IOM and UN-Habitat. The report received generous support from the Royal Norwegian Embassy.

Rural and urban inequalities continue to persist in the region despite significant development progress in ASEAN. This is further exacerbated by the COVID-19 pandemic which has dramatically affected the distribution of resources and goods, as well as the movement of people across the rural and urban spaces. Unleashing the potential of rural communities, linking local development with urban spaces, and ensuring inclusive development in urban cities continue to present challenges. As such, it is of utmost importance for ASEAN to closely examine policy and programme approaches that promote and facilitate inclusive development across the rural and urban continuum. This in turn can inform the priorities and work of concerned ASEAN Sectoral Bodies.

A core strength of this study is the application of Gender Equality and Social Inclusion (GESI) as the conceptual framework to analyse the multifaceted issues in the urban-rural continuum. It formulated recommendations that consider the existing strategies and practices to move towards more inclusive development particularly to meet the rights of women, children, and people with disabilities, and other vulnerable and marginalised groups. Moreover, the study highlights various designed initiatives to translate this commitment into actions to promote sustainability and uplift the living standard of ASEAN people.

This study was informed and enriched by a rigorous consultative process. A series of focus group discussion (FGD) were conducted to gather insights and perspectives from the ASEAN Member States, relevant ASEAN Sectoral Bodies, international organizations, and think tanks. An Experts’ Group was established, ensuring the convergence of crucial policy perspectives.

I hope that the study will prove useful to policymakers and stakeholders. In particular, the analysis and recommendations can be considered by policymakers in designing inclusive development policies, strengthening the positive linkages between urban, peri-urban, and rural areas, and promote collaboration amongst relevant ASEAN Sectoral Bodies.



PATERNA M RUIZ

Deputy Director General
National Anti-Poverty Commission,
Philippines

Chair, SOMRDPE

FOREWORD

The process, content, and result of the Workshop on Urbanisation in the ASEAN region held last January 26, 2022, were all faithfully recorded by the ASEAN Secretariat, and documented under the title “*Study on Urbanisation, People’s Mobility and Inclusive Development Across Urban-Rural Continuum in ASEAN*”.

Urbanisation is a fast-unfolding phenomenon happening in the 21st century in the countries of the ASEAN region. What does this phenomenon mean to most ASEAN Member States (AMS) where there is an imbalance in the economic development between urban and rural areas– that in turn gives rise to issues such as carrying capacities of cities, breakdown of social services and the concentration of the cash- poor people in the rural areas? These are among the crucial issues we must confront.

As the Chairperson of the ASEAN Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE), I would recommend the study as a suitable reading. If you are interested in understanding deeper state policies (past and present) among AMS, policies on advocating for inclusive development–more specifically in rural development and the eradication of rural poverty–the study will be very helpful.

Moreover, I would like to consider the document as a living study that will continually be enriched in the years to come. For us senior officials who are in the forefront in the development of policies and strategies, I consider the study as a major reference material. Our work for rural development is a daunting task in the eradication of poverty. Studies like this are very valuable and helpful.

I wish to acknowledge the invaluable help of the Resilience Development Initiative who has been commissioned to conduct the research and develop the study. The same acknowledgment also goes to the AMS for their active participation and contribution to the different processes involved.

Armed with this study document and the experience of the workshop it reflects, it is my hope that with courage and determination, each ASEAN Member State will adequately handle the reality of urbanisation and the inclusivity of development across urban-rural continuum in their respective countries.



H.E. Mr. Kjell Tormod Pettersen

Ambassador to ASEAN
for The Kingdom of Norway

FOREWORD

Today, more than half of the population of ASEAN live in urban centres. Urban centres are often associated with thriving development, and cities are expected to further drive ASEAN's growth in the years ahead.

Although urban centres are considered engines for growth in ASEAN, urbanisation nevertheless presents many challenges, including negative impact affecting rural areas. City congestion and the formation of informal settlements, lack of access to adequate housing, public services, clean drinking water and sanitation, social disconnection and air-pollution are some of the challenges. Pressured cities also become more vulnerable to climate change and natural disasters. In rural communities, many are experiencing population decline, increased economic hardship and difficulties in accessing social services. Redistribution of resources from rural areas to cities presents other issues and problems.

As part of an effort to fully understand the effect of urbanisation in ASEAN countries, Norway and ASEAN launched in 2020 a joint study on urbanisation, people mobility and inclusive development. The study is expected to provide ASEAN Member States with a comprehensive assessment of the effects of urbanisation and inclusive development. This study might be a useful tool for policy makers to address issues of spatial inequality and poverty in the communities. Furthermore, it will also support policy makers by providing recommendations regarding policies addressing inclusive development and ensuring no one is left behind.

I wish to extend my appreciation to the ASEAN Secretariat, the International Organisation for Migration and UN-Habitat for their work the past couple of years, overcoming the challenges of the covid pandemic to produce this study, and the ASEAN Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE) for their support and endorsement of the project.

It is my hope that this study will be beneficial to the objectives embodied in the ASEAN Framework Action Plan on Rural Development and Poverty Eradication and contribute to strengthening the urban and rural development policies and poverty eradication initiatives in the ASEAN region.

TABLE OF CONTENTS

FOREWORD	v
FOREWORD	vi
FOREWORD	vii
LIST OF ABBREVIATIONS	xi
LIST OF TABLES	xiv
LIST OF FIGURES	xv
EXECUTIVE SUMMARY	1
1. INTRODUCTION	3
1.1. Background	4
1.2. Objectives	5
1.3. Methodology	5
1.4. Conceptual Framework	9
2. CURRENT SITUATION ANALYSIS IN AMS	11
2.1. Urbanisation Trend and Projection of Migration in ASEAN	12
2.1.1. Urbanisation and Migration	12
2.1.2. COVID-19 Impact on Urbanisation and Migration	13
2.2. Urban-Rural Continuum	15
2.2.1. Urbanisation Dynamic of Main Cities in ASEAN	18
2.2.2. Urbanisation Dynamic of Intermediate Cities, Market Towns, Villages, and Settlements in ASEAN	18
2.2.3. Urban-Rural Linkages	20
2.3. Situational Analysis in ASEAN	22
2.3.1. Economic Growth, Poverty, and Non-Inclusive Growth	22
2.3.2. Education and Employment	24
2.3.3. Health Issues in AMS	27
2.3.4. Gender Equality and Social Inclusion in AMS	31
2.4. Vulnerabilities across the urban-rural continuum	40
2.4.1. Education and Employment	40
2.4.2. Health Issues in AMS	45
2.4.3. Gender Equality and Social Inclusion Issues in AMS	49
2.4.4. Environment	57
3. EXISTING POLICY RESPONSES IN ASEAN TO PROMOTE SUSTAINABLE DEVELOPMENT AND URBANISATION	69
3.1. Relevant Actions/Sectoral Plans/Strategies	72
3.1.1. Global Frameworks	72
3.1.2. ASEAN	77

3.2. Relevant Main Coordination Government Mechanisms in AMS (Planning, Horizontal Coordination Nationally, Vertical Coordination)	84
3.2.1. Urbanisation	84
3.2.2. Education and Employment	87
3.2.3. Health	91
3.2.4. Gender Equality and Social Inclusion	93
3.2.5. Environment	94
3.3. Relevant Policy Innovations in AMS in Recent Years	101
3.3.1. Urbanisation	101
3.3.2. Education and Employment	101
3.3.3. Health	102
3.3.4. Gender Equality and Social Inclusion	103
3.3.5. Environment	104
3.4. Available Tools for Policy Integration and Collaborative Action in ASEAN	104
3.4.1. Urbanisation	104
3.4.2. Education and Employment	105
3.4.3. Health	106
3.4.4. Gender Equality and Social Inclusion	106
3.4.5. Environment	108
4. Identifying Challenges, Barriers, and Key Opportunities to Reduce Vulnerabilities for Sustainable and Inclusive Urbanisation	111
4.1. Challenges and Barriers	112
4.1.1. Urbanisation	112
4.1.2. Education and Employment	112
4.1.3. Health	113
4.1.4. Gender Equality and Social Inclusion	113
4.1.5. Environment	114
4.2. Key opportunities	115
4.2.1. Urbanisation	115
4.2.2. Education and Employment	115
4.2.3. Health	115
4.2.4. Gender Equality and Social Inclusion	116
4.2.5. Environment	117
4.3. Lessons Learned on Reducing Vulnerabilities and Sustainable/Inclusive Urbanisation from Other Regions	117
4.3.1. Urbanisation	117
4.3.2. Education & Employment	119
4.3.3. Health	119
4.3.4. Gender Equality and Social Inclusion	120
4.3.5. Environment	121
5. RECOMMENDATION FOR REGIONAL ACTIONS AND STRATEGIES IN ASEAN	123
5.1. Integrated Policy and Collaborative Framework	124
5.2. Considering COVID-19 and Recovery	125

5.3. Areas for Collaboration and Integration within ASEAN Secretariat Divisions and relevant Centre/Facilities	125
5.4. Areas for Transnational Collaboration	125
5.5. Medium-/Short-term Agenda for ASEAN Member States National Governments	126
5.6. Medium-/Short-term Agenda for Sub-national Regional/Provincial Governments	127
5.7. Areas for ASEAN-UN Collaboration on Policy, Data, Action Plan, and Framework for managing urban-rural continuum and people's mobility for inclusive development	127
REFERENCES	128
ANNEX I. URBAN-RURAL CLASSIFICATION IN AMS	139
ANNEX II. SUPPORTING DATA, FIGURES, TABLES	143
ANNEX III. LESSONS LEARNED AND GOOD PRACTICES WORLDWIDE	151
Good practices in developing good public health services across the world	151
Good practises in developing gender equality and women's empowerment in constitutions across the world	152
ANNEX IV. ENVIRONMENTAL MAJOR IMPACTS IN KEY SECTOR PER COUNTRY	154
ANNEX V. LIST OF PARTICIPANTS IN FGDs AND INTERVIEWS	158

LIST OF ABBREVIATIONS

ACMW	ASEAN Committee on the Implementation of the ASEAN Declaration the Protection and Promotion of the Rights of Migrant Workers
ACWC	Association for Southeast Asian Nations Commission on Children and Women Rights
ADB	Asian Development Bank
ADO	ASEAN Development Outlook
AICHR	Association for Southeast Asian Nations Intergovernmental Commission on Human Rights
AIDS	Acquired Immune Deficiency Syndrome
ALD	ASEAN Leaders' Declaration
AMMW	Association for Southeast Asian Nations Ministerial Meeting on Women
AMS	ASEAN Member State
ART	Antiretroviral Therapy
ASCC	ASEAN Socio-Cultural Community
ASEAN	Association for Southeast Asian Nations
ASEAN-DF	Association for Southeast Asian Nations Disability Forum
ASUS	ASEAN Sustainable Urbanisation Strategy
BPfA	Beijing Platform for Action
BPS	Badan Pusat Statistik (Central Bureau of Statistics)
CBD	Central Business District
CBR	Community-Based Rehabilitation
CC	Climate Change
CE	Carbon Emission
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CNCC	Cambodia National Council for Children
COVID-19	Coronavirus Disease of 2019
CPAC	Committee of the Protection and Assistance of Children
CRC	UN Convention on the Rights of the Child
CRD	Chronic Respiratory Disease
CRPD	Convention on the Rights of Persons with Disabilities
CSW	Commission on the Status of Women
CVD	Cardiovascular Disease
CYP	Children and Young People
DHS	Demographic Health survey
DPO	Disability People Organisation
DRM	Disaster Risk Management
DRPPA	Desa Ramah Perempuan dan Peduli Anak (Women-Friendly and Caring for Children Village)
EMR	Extended Metropolitan Region
ESCAP	Economic and Social Commission for Asia and the Pacific
FAO	Food and Agriculture Organisation of the United Nations
FDI	Foreign Direct Investment

FGD	Focus Group Discussion
GAD	Gender and Development
GDP	Gross Domestic Product
GHE	Government Health Expenditure
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNI	Gross National Income
GNP	Gross National Product
HIV	Human Immunodeficiency Virus
ICF	International Classification of Functioning, Disability and Health
ICT	Information, Communication, and Technology
ILO	International Labour Organisation
IMR	Infant Mortality Rate
IOM	International Organisation for Migration
JMA	Jakarta Metropolitan Area
KPAI	Komisi Perlindungan Anak Indonesia (Indonesian Child Protection Commission)
LBH APIK	Lembaga Bantuan Hukum Asosiasi Perempuan Indonesia untuk Keadilan (The Indonesian Women's Association for Justice Legal Aid Institute)
LE	Life Expectancy
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer, & Intersex
LMIC	Lower-Middle Income Countries
LULUCF	Land Use Change Forestry
MCO	Movement Control Order
MDG	Millennium Development Goal
MGI	McKinsey Global Institute
MGSDC	Manila Gender Sensitivity and Development Council
MMR	Maternal Mortality Rate
MNCWA	Myanmar National Committee for Women's Affair
MoWECP	Ministry of Women's Empowerment and Child Protection
MPAC	Master Plan on ASEAN Connectivity
MSM	Men who have Sex with Men
MUR	Mega Urban Region
NAP	National Action Plan
NAPVAW	National Action Plan for Prevention Violence against Women
NCAWMC	National Commission for the Advancement of Women, Mothers, and Children
NCD	Noncommunicable Disease
NCRC	National Committee on the Rights of the Child
NDPA	National Development Planning Agencies
NFCP	National Framework on Child Protection
NPAGE	National Plan of Action on Gender Equality
NPAVAWVAC	National Plan of Action on Preventing and Elimination of Violence Against Women and Violence against Children
NSPAW	National Strategic Plan for the Advancement of Women
NTD	Neglected Tropical Diseases
NUA	New Urban Agenda
NWP	National Women Policy

OECD	Organisation for Economic Co-operation and Development
OSCC	One Stop Crisis Centre
P2TP2A	Pusat Pelayanan Terpadu Pemberdayaan Perempuan dan Anak (Integrated Service Center for Women and Children Empowerment)
PCA	Principal Components Analysis
PCW	Philippine Commission on Women
PHDI	Planetary pressures-adjusted HDI
PLHIV	People Living with HIV
POHA	Protection from Harassment Act
PPP	Purchasing Power Parity
PWD	People with Disability
PWID	People Who Inject Drugs
RGC	Royal Government of Cambodia
SASOP	Standby Arrangements and Standard Operating Procedures
SDG	Sustainable Development Goal
SEA	Southeast Asia
SLOM	Senior Labour Officials Meeting
SLR	Systematic Literature Review
SMEs	Small and Medium Enterprises
SMR	Semarang Mega Region
SOGIE	Sexual Orientation and Gender Identity Expression
SOMHD	Senior Officials Meeting on Health Development
SOMRDPE	Senior Officials Meeting on Rural Development and Poverty Eradication
SUSENAS	Survei Sosial Ekonomi Nasional (National Socio-economic Survey)
TAFEP	Tripartite Alliance for Fair & Progressive Employment Practices
TB	Tuberculosis
TESA 129	Telepon Sahabat Anak 129 (Child's Friend Phone 129)
TVET	Technical and Vocational Education and Training
U5MR	Under-5 Mortality Rate
UHC	Universal Health Coverage
UN	United Nations
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
UNSTAT	United Nations Statistics Division
UN-Habitat	United Nations Human Settlements Programme
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
URB	Urbanisation
USD	United States Dollar
VAW	Violence against Women
WASH	Water Sanitation and Hygiene
WEE	Women's Economic Empowerment
WFFC	World Fit for Children
WHO	World Health Organisation
WPS	Women, Peace, and Security

LIST OF TABLES

Table 2.1.	Sex Ratio at birth in AMS in 2017-2019	14
Table 2.2.	Drivers of Urbanisation in AMS	18
Table 2.3.	Urban and Rural Migration Factors in AMS Country	26
Table 2.4.	National Characteristics of AMS as Factors in Health Provision	28
Table 2.5.	Demographic Health Survey in AMS	29
Table 2.6.	Proportion of Population Below Rural and Urban Poverty Lines	32
Table 2.7.	Labour Force Participation by Region and Locality in Lao PDR	45
Table 2.8.	Household Wealth or Income in AMS	47
Table 2.9.	Education in AMS	48
Table 2.10.	Working Life in AMS	49
Table 2.11.	Rate of Informal Employment by formal/informal sector (workers in informal employment/total employed), excluding agriculture	52
Table 2.12.	List of AMS with Dedicated/Comprehensive Domestic Violence Legislation	53
Table 2.13.	Proportion of Social Media Posts that referenced each of the topics considered, September 2019 to November 2020 (percentage)	54
Table 2.14.	AMS Facts on Physical Violence against Children	56
Table 2.15.	A Country-by-country Breakdown of the Processes in Place to Receive Allegations of Violence against Children	57
Table 2.16.	The Risk Score Comparison of Vulnerability and Climate Change Rank in each AMS Country	61
Table 2.17.	PHDI Level, Carbon Dioxide, Material Footprint, and GHG Emission for each AMS Country	67
Table 3.1.	Global Framework in Education and Employment	74
Table 3.2.	Global Frameworks on Public Health Issues	75
Table 3.3.	Global Frameworks of Vulnerable Groups Protection	76
Table 3.4.	Global Commitments on Environmental Management	77
Table 3.5.	ASEAN Policy in Education and Employment	79
Table 3.6.	ASEAN Policy on Public Health Issues	81
Table 3.7.	National Policy for Education in AMS	88
Table 3.8.	National Policy for Employment in AMS	90
Table 3.9.	Relevant Main Coordination Government Mechanisms on Public Health Issues	92
Table 3.10.	National Government Mechanisms in AMS	94
Table 3.11.	National Disaster and Climate Risk Reduction Policies, Plans, and Legislation in Cambodia	96
Table 3.12.	Policy Innovations on Education and Employment	103
Table 3.13.	Policy Innovations on Public Health Issues	103
Table 3.14.	ASEAN's Key Documents on Social Welfare and Development	104
Table 3.15.	Available Tools on Public Health Issues	107

LIST OF FIGURES

Figure 1.1. Conceptual Framework (Push and Pull Factors in relation with urbanisation scenario, impacts, and GESI-related issues)	10
Figure 2.1. Annual Percentage of AMS Urban Population at Mid-Year in 2011, 2021, and 2031	13
Figure 2.2. Average Annual Rate of Change of the Percentage Urban Across AMS in 2010-2015, 2015-2020, and 2020-2025	13
Figure 2.3. COVID-19 Epidemic Curve among AMS	15
Figure 2.4. Built-up area change in the ASEAN Region (percent of the total land)	17
Figure 2.5. Percentage of agriculture area to land area	22
Figure 2.6. Average annual rate of change of the rural population (percent)	22
Figure 2.7. Population Living in Slums (% of Urban Population) in 2014, 2016, and 2018	25
Figure 2.8. Completion Rate for Primary, Lower Secondary, and Upper Secondary Education in AMS According to Urban and Rural Settings	25
Figure 2.9. Disability prevalence in AMS (percent)	33
Figure 2.10. Gender Difference in the Likelihood of Living in Slums	34
Figure 2.11. Out-of-school children in AMS (Left) & Education Gender Gap in AMS (0 to 1, 0=inequality and 1=equality) (Right)	42
Figure 2.12. Proportion of Youth Not in Education, Employment, or Training (NEET) Rate (%)	43
Figure 2.13. Employment by Sectors and Regions, 2013 (%)	44
Figure 2.14. Rate of Informal Employment by Urban/Rural excluding Agriculture (%)	46
Figure 2.15. Annual Average Losses caused by Major Natural Hazards in Southeast Asia	62
Figure 2.16. CO2 emissions from fossil fuel combustion and GHG emissions from LULUCF (left) and GHG emissions shared by LULUCF category (right) per country/region in 2018.	66
Figure 2.17. Southeast Asian biodiversity hotspots and projected urban land expansion	67
Figure 3.1. Sunburst graphs for available policies analysed	72
Figure 3.2. Illustration of the Most Deprived Groups in AMS	83

EXECUTIVE SUMMARY

Urbanisation in the ASEAN region is mainly driven by urban population and economic growth, which in turn creates more job opportunities—resulting in the rapid development of the urban and extended urban areas. Moreover, decentralisation in several ASEAN Member States (AMS) also boosted the urbanisation process and economic growth as local governments extend their power and authority for their level of administration. These factors have influenced urban growth, often also resulting in the expansion of urban areas, emerging peri-urbanisation, suburbanisation, and other transformation in rural areas surrounding the urban areas.

While urbanisation patterns suggest some improvement in enhancing economic growth through economic activity in urban areas, they signal less success in other areas, such as social development and the environmental sector. Some nations have an inclusive agenda that permits them to adjust their laws and regulations to enhance social development. However, if it is not carefully managed, the actual goals will not be met. Urbanisation has also made the government pay attention to poorly developed areas and informal community settlements in AMS. Consequently, the government also prioritises the development of those areas. It also results in those areas eventually receiving subsidies for basic services such as water supply, sanitation, and safe-clean fuels, particularly in areas where inhabitants have the potential to transform hardship into economic, social, and environmental opportunities. Due to the availability of programmes centred on inclusion, there are now more vocational programmes, training, and rehabilitation services available for vulnerable groups.

Urbanisation has certain adverse effects, one of which is the emergence of specific public health problems. These are due to the particular environment of the settlement and the quality of life it stimulates. Public health issues also include the prevalence of communicable and non-communicable diseases that cause high mortality and morbidity. Urbanisation leads to population growth, geographic expansion, high density of people and buildings, and a tremendous variety of economic activities. These cause problems with water, sanitation, and hygiene issues, vector-borne diseases, various mental issues, sexual and reproductive health issues, air pollution and environmental problems, health insurance, and other urban signs specific to the city's location. Practical approaches focusing on the most critical health and socio-economic issues are essential to developing successful public health services. For many countries in the region, one of the critical challenges is balancing among different service providers, considering general resource constraints, the effectiveness of service delivery, and improved welfare. Governments in developing countries need to increase their involvement in public health services, but in other areas, policymakers and regulators serve different stakeholders.

The broader scope of the integrated sectors in urbanisation, including education, employment, health, and infrastructure, demands a comprehensive explanation that considers gender equality and social inclusion. As the main driver of urban pull factors, employment has triggered urban-rural exodus; meanwhile, education also plays a role as a co-factor. This phenomenon happens in most AMS due to the

distinction between urban and rural settings that refer to migration flows between the two regions. However, this context might not be applicable in all AMS, particularly AMS which are highly urbanised and don't have rural areas. Therefore, as the impact of urbanisation, those urbanised areas will expand their amenities by providing essential services, including housing, education, health, as well as water and sanitation. These service infrastructures also contributed to form peri-urban areas, coupled with urban employees that somehow prefer to reside in neighbouring towns. On the other hands, the development in urban areas also might give multiplier effects in creating new job opportunities.

While the urban population has increased, energy demand and environmental issues, such as loss of green spaces, loss of biodiversity, and solid waste have also increased. Urbanisation has encouraged fossil fuel and energy consumption through transportation and industrialisation which produces carbon emissions. The region's economy has more than doubled in size since 2010, and an increase of 120 million population has been concentrated in urban areas. Low energy prices, which has increased economic growth, has also resulted in the ASEAN region's increase of aggregate GHG emissions, which are expected to double by 2040 if there is no significant decarbonisation.

The constant risk of natural hazards in Southeast Asia compelled all member states to understand disaster risks. Based on INFORM and RVA indicators, the comparison of vulnerability risk scores in each country showed Myanmar, the Philippines, and Lao PDR as the most vulnerable. Meanwhile, the climate risk index showed five countries most affected by climate change in the world, which are Myanmar, Cambodia, Thailand, Viet Nam, and the Philippines. Poorly planned urbanisation will also increase vulnerability, as people who live in poor living conditions and informal settlements increase. At the

same time, unplanned urbanisation also causes environmental pressure due to population growth, land-use change, and dependence on ecosystem services.

This study provides recommendations with regard to integrated policy and collaborative framework, while also considering COVID-19 recovery, areas for collaboration and integration within ASEAN Secretariat and relevant centre/facilities, transnational and ASEAN-UN collaboration, as well as medium-/short-term agenda for AMS and sub-national regional/provincial governments. Strengthening collaborations, especially vertically and horizontally, is important to manage the dynamics of urbanisation from the urban and rural sides, to implement programmes that invest in human resources education, and to bridge the urban-rural divide.

Corresponding to the COVID-19 recovery, recommendations of the study include promoting COVID-19 recovery using digital technology as an instrument, developing programmes which aims to tackle problems which emerged due to the pandemic, addressing the digital divide with regards to violence against vulnerable groups, and strengthening coordination with ASEAN Disability Forum at the regional level as well as Disability People Organisations in each AMS. Collaboration and integration within ASEAN Secretariat Divisions and Relevant Centres/Facilities, transnational collaboration, as well as ASEAN-UN collaboration should also be done by providing opportunities for knowledge exchange and policy mobility, strengthening collaboration and collaborative programmes to promote the development for education, gender equality, rights of children, the elderly and PWD, and to promote sustainable urbanisation through policy networking.



1.

INTRODUCTION

1.1. Background

Urbanisation has become one of the megatrends occurring worldwide. Urbanisation is defined as a process of making an area more urban, due to the increasing proportion of the urban population by the natural increase of population in urban areas as well as urban-rural migration and mobility. The definitions of ‘urban’ across countries differ contextually in accordance with their countries’ situations. However, most statistics worldwide defined ‘urban’ “traditionally” i.e., according to density and threshold, while in general, the rural is not really defined, and often refers to all areas that are not categorised as urban. The different definitions generate implications of the ‘urban’ and ‘rural’, making urbanisation seem like a process of change from rural to urban. However, urbanisation is a complex process, and it is demonstrated through the emergence of transitional areas, for example, due to in-situ urbanisation¹ and extended urbanisation². The notion of Extended Metropolitan Region (EMR)³ and Mega Urban Region (MUR)⁴ shows that the ‘urban’ and ‘rural’ are not dichotomous. In this sense, some regions are not purely ‘urban’ or purely ‘rural’, but are something in between. Therefore, the use of the term ‘urban-rural continuum’ will be beneficial in portraying urban-rural linkages.

Urbanisation acts as a driver of development, poverty eradication, and inequality reduction by providing more opportunities to improve livelihoods. However, it also determines the future of sustainability and inequality both within the urban area and between rural and urban areas. Women, poor women, poor households, children who are left behind, youths (with a specific focus on girls), people with disabilities, and elderly people are amongst the most vulnerable groups impacted by urbanisation.

The Study on Urbanisation, People Mobility and Inclusive Development across the Urban-Rural Continuum in ASEAN (hereafter referred to as “the Project”) is a joint study implemented by the ASEAN Secretariat, together with IOM, UN-Habitat, and other relevant United Nations Agencies. The study includes analyses on the multifaceted issues concerning the urban-rural continuum, the identification of key actors, stakeholders, existing strategies, and practices in AMS. The study assesses the effects of urbanisation and inclusive development in ASEAN, provides recommendations regarding policies and regulations addressing inclusive development across the urban-rural continuum and ensures no one is left behind.

The aforementioned purpose is in line with the ASEAN Framework Action Plan on Rural Development and Poverty Eradication’s objective to strengthen the convergence of rural development and poverty eradication initiatives at the local, national, and regional level through improved coordination mechanisms, policy coherence, and effective localisation of rural development as well as poverty eradication programmes and actions. The Project also aims to contribute to the realisation of the ASEAN Community Vision 2025 and the implementation of the ASCC Blueprint 2025, particularly the strategic measure: “Strengthen positive economic, social and environmental linkages among urban, peri-urban and rural areas” at the regional level, as well as IAI Work Plan and the ASEAN Sustainable Urbanisation Strategy (ASUS) under the Master Plan on ASEAN Connectivity (MPAC) 2025; and the achievement of the Agenda 2030 for Sustainable Development, New Urban Agenda, and Global Compact on Migration at the global level.

¹ In-situ urbanization is defined as place-based urbanization of rural-areas, which is characterised not only by expanding non-farm opportunities in the areas, but also by strengthening economic linkages with the neighbouring areas (UNDESA, 2021).

² Extended urbanisation is defined as new and existing urbanization and urban settlement in the periphery of cities and relations that condition these spaces but also reach beyond them (e.g., mines factories and infrastructure) (Keil, 2018).

³ EMR is defined as transitional *desakota* zones commonly located along transport corridors radiating out of the metropolitan area, characterised by an intense mix of urban and rural activities (McGee & Greenberg, 1992).

⁴ MUR is defined as an extension of mega-cities beyond the city and metropolitan boundaries (Swerts & Denis, 2015).

1.2. Objectives

Corresponding to the purpose mentioned above, the Project aims to accomplish the following set of objectives:

1. To analyse the multifaceted issues on the urban-rural continuum and identify key policy gaps;
2. To describe the local functions and strategies together with identification of key actors and stakeholders;
3. To formulate recommendations that consider the existing strategies and practices in ASEAN supporting progress on inclusive development across the urban-rural continuum. Furthermore, these recommendations intend to promote a people-centred approach and integrated policy framework to address cross-sectoral/cross-pillar collaboration at the sub-national, national, and regional levels; and
4. Taking into account the current global situation due to COVID-19 pandemic and other health and disease issues. Particularly regarding the importance of coordination between urban and rural government, and also local governments of peripheral areas, along with their effectiveness in addressing and supporting health, infrastructure, and livelihood issues, and draw some lessons learned in order to recommend forward-looking actions.

In order to achieve the proposed objectives above, through designated methodological approaches (desk review, FGD, and interview), the project will focus on three main areas:

1. Assessing current evidence in the context of the trends in order to identify key opportunities and challenges through a desk review of existing studies, reports and data, with an eye on reducing the vulnerabilities of urban and rural communities, including both migrants and those staying behind.
2. Identifying governments' current practices and responses through desk review and Focus Group Discussions (FGD) with relevant institutions. The approach includes reviewing existing policy frameworks, administrative structures, available statistics and related systems, at all levels – including ASEAN, national and local levels to identify key policy gaps.
3. Examining available tools for integrated policy frameworks and response, as well as mapping of the stakeholders. In doing so, the study also includes the experiences and good practices by the national and local governments within the ASEAN and other regions of the world.

1.3. Methodology

As this study mainly focuses on the national level, the urban-rural classification was developed based on in-country definitions (see Annex I). This study also takes into consideration the ASUS urban-rural classification i.e. mega-region, large middleweight regions, small middleweight regions, small regions, and rural regions, but the terms were not used immediately. Instead, this study explored whether such a pattern emerges after analysing the urban-rural continuum or linkages in relevant sectors, i.e., health, education,

environment, and social inclusion. In assessing the urban-rural linkages and continuum, this study focuses on analysing the data related to three aspects in urban-rural flows, which are **1) People**, which refers to dynamic movement of people in the urban-rural continuum, and their relationships with communities, cultures, and economies; **2) Amenities**, which refers to features that are provided for the needs of people and support their activities (tangible and intangible); and **3) Capital**, which refers to economic and financial resources (subject to data availability). By assessing each sector, identification of the patterns concerning urban-rural linkages can be thoroughly investigated.

Desk Review: The researchers conducted a detailed review of relevant documents on migration, sustainable urbanisation, inclusive urbanisation, and urban-rural continuum for the last 10 years in the ASEAN region. Desk reviews were done by compiling, analysing, and examining secondary data, including existing research, literature, and analyses of secondary data covering the ASEAN Member States (AMS), additional data supplied by governments of AMS, as well as reviewing various ASEAN documents, regional instruments, country-level documents, studies, relating to urbanisation and rural development, UN and global documents.

Initial findings on the overview of the current situation, existing policy responses, as well as challenges, barriers, and key opportunities in regards to the topic in the AMS were provided through the desk review process.

Virtual Meetings with the Expert Committee: The researchers participated in two virtual meetings with the Expert Committee to gather feedback on the draft inception report and draft study report. Inputs from the Expert Committee are used for developing the study methodology and discussing the findings.

Virtual Focus Group Discussion and Interviews: Focus group discussions were held with representatives from various ministries, think-tanks, and multilateral organisations across AMS (see Annex IV). Focus group discussions were held virtually, due to the COVID-19 pandemic. The focus group discussions used open-ended or semi-structured questions with additional questions for points clarification provided by the researchers. The groups of representatives from National Development Planning Agencies (NDPA), Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE), senior officers, and representatives from the ASEAN Secretariat, and other related ministries' representatives were included in the virtual focus group discussions and interview. The FGDs and interviews were conducted throughout 12–29 October 2021, with AMS, UN agencies, think tanks, research institutions, and study centres as part of the data collection process for the study report. The FGD session with AMS was attended by representatives of Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, and Thailand. As for Singapore, the representatives have provided a written response to the FGD questions. In addition, the researchers received written responses from SLOM and ACMW Viet Nam, SLOM and ACMW Cambodia, SOMHD Malaysia, Economic Planning unit of Malaysia, Ministry of Health of Cambodia, and the Ministry of Culture, Youth, and Sports Brunei Darussalam.

For the interviews, UN agencies and relevant international organisations participated in the interview session, namely UNAIDS, UNFPA, UN-Habitat, UNESCO, UN Women, ILO, FAO, ESCAP, and ADB. There were also two separate FGDs with think tanks. Five think tanks that attended the first session were the Groningen Research Center for Southeast Asia and ASEAN (SEA ASEAN), ASEAN Studies Center ISEAS - Yusof Ishak Institute, Center for Southeast Asian Studies Indonesia, Center for Southeast Asian Social Studies UGM, and the National Institute of Health - University of the Philippines Manila. Furthermore, the second session was attended by three Think Tanks; The Asian Partnership for the

Development of Human Resources in Rural Asia (AsiaDHRRA), J-PAL Southeast Asia, and the Center for Energy, Ecology and Development (CEED).

Data Gathering and Analysis: Data and information were collected through desk review, interviews, and focus group discussions with relevant stakeholders in policy making and experts in the appropriate field, and secondary data collection was compiled and analysed by using different methods of analysis, including trend analysis, projection analysis, content analysis, coding method, quantitative descriptive, narrative and systematic literature review, gaps analysis, and stakeholder mapping.

Content analysis is described as the scientific study of the content of the communication. It studies the content regarding the meanings, contexts, and intentions contained in messages (Prasad, 2008). The purpose of content analysis is for the desk-based review to conduct Gender and Inclusion analysis and the Education aspect that is commissioned to verify the initial data collected for the programme proposal with the current situation. This sharpens the initial analysis on the baseline assessment report through providing a more up-to-date detailed analysis which delves deeper into the underlying issues. The datasets available contain the meanings, contexts, and intentions about gender, social inclusion, and education.

Coding method analysis was utilised in the focus group interviews. The coding method was conducted by summarising empirical substance, in which coding refers to the identification and categorisation of participants' responses based on specific keywords that are related to the topics (e.g., patterns, demography/age and gendered dynamics, urban-rural linkages, including food security, remittances, return migration, children staying behind, economic linkages between rural communities, gender equality and social inclusion, public health and pandemics, among others). The researchers conducted interviews and FGDs, categorized the opinions, and further identify the generalisations. The researchers later took notes, combined, and classified similarities and differences of views revealed through the participants' narratives.

Quantitative Descriptive Analysis (QDA) is central to analysing quantitative data. As the name implies, the QDA method relies on measurement and quantification. Descriptive analysis transforms raw data into a form that made them easy to understand and interpret. The data later became subject to rearrangement, reordering, and manipulation to generate descriptive information.

Systematic Literature Review (SLR): Through systematic literature review (SLR), the researchers identified, selected, and reviewed previous publications in the past 10 years based on selected search terms⁵ on Scopus and the relevance of the content. The SLR method was based on Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) that primarily focuses on the reporting of reviews evaluating the effects of interventions as a basis for reporting systematic reviews (PRISMA, 2021). Using the search term, 816 studies were found and filtered to 39 studies based on their relevance. Through our review, we draw out insights that may enable their systematic treatment. The systematic treatment of the previous related research was included categorisation of paper based on the authors, specific focus of the country (AMS), the topic/aims, background, methodology of the research, urbanisation patterns, urban-rural characteristics/development, urbanisation push and pull factors, impact/outcome, related policies, and conclusion of the paper.

⁵ Search term used for SLR: ({urbanisation} OR {urbanization}) AND {southeast asia} OR (singapore) OR (malaysia) OR (indonesia) OR (viet AND nam) OR (thailand) OR (laos) OR (lao AND pdr) OR (philippines) OR (brunei AND darussalam) OR (myanmar) OR (cambodia)

Preparation for the Draft of the Study Report: A draft for the study report was prepared based on the desk review findings, data gathering, and data analysis. The draft of the study report is important to ensure that the objectives are met, and the key questions are answered.

Virtual Workshop: During the development of the study report, the researchers organised a workshop with the AMS. The workshop was conducted in the form of a Focus Group Discussion (FGD). The draft of the study report was presented and discussed in the workshop in order to gather input from the AMS and validate the findings.

Finalisation of the Draft of the Study Report: Final draft of the study report was submitted following the workshop after incorporating inputs from the ASEAN Sectoral Bodies.

Participation in the Regional Forum: The Regional Forum aims to provide a platform to present the final Study Report.

Study Limitations

Throughout the preparation phase of this study, there are some limitations that the researchers faced as follows:

1. Due to the unequal data availability, some data is available in several, but not all AMS.
2. Some data specifically showing conditions in urban and rural areas are not available, for example, urban share to GDP in AMS as well as urban and rural shares of employment by main economic sectors.
3. Different definitions of urban, rural, and transition areas in the AMS.
4. Several time-series data are incomplete, for example, Gini index, gender-disaggregated data (e.g., data of people living with disability), HIV/AIDS data.
5. No available data in some regions because of privacy reasons.

The unavailability of data was mitigated through finding and utilising literature sources from secondary data and previous studies that have provided similar topics. Meanwhile, for the different definitions of urban, rural, and transition areas, the researchers and the ASEAN Secretariat then agreed to unify these terms in the working definition section.

1.4. Conceptual Framework

The following is the conceptual framework of this study which explains the socio-economic, cultural, environmental, and public health factors, urbanisation scenario, impacts, and their correlation with the Gender Equality and Social Inclusion (GESI) related issues.

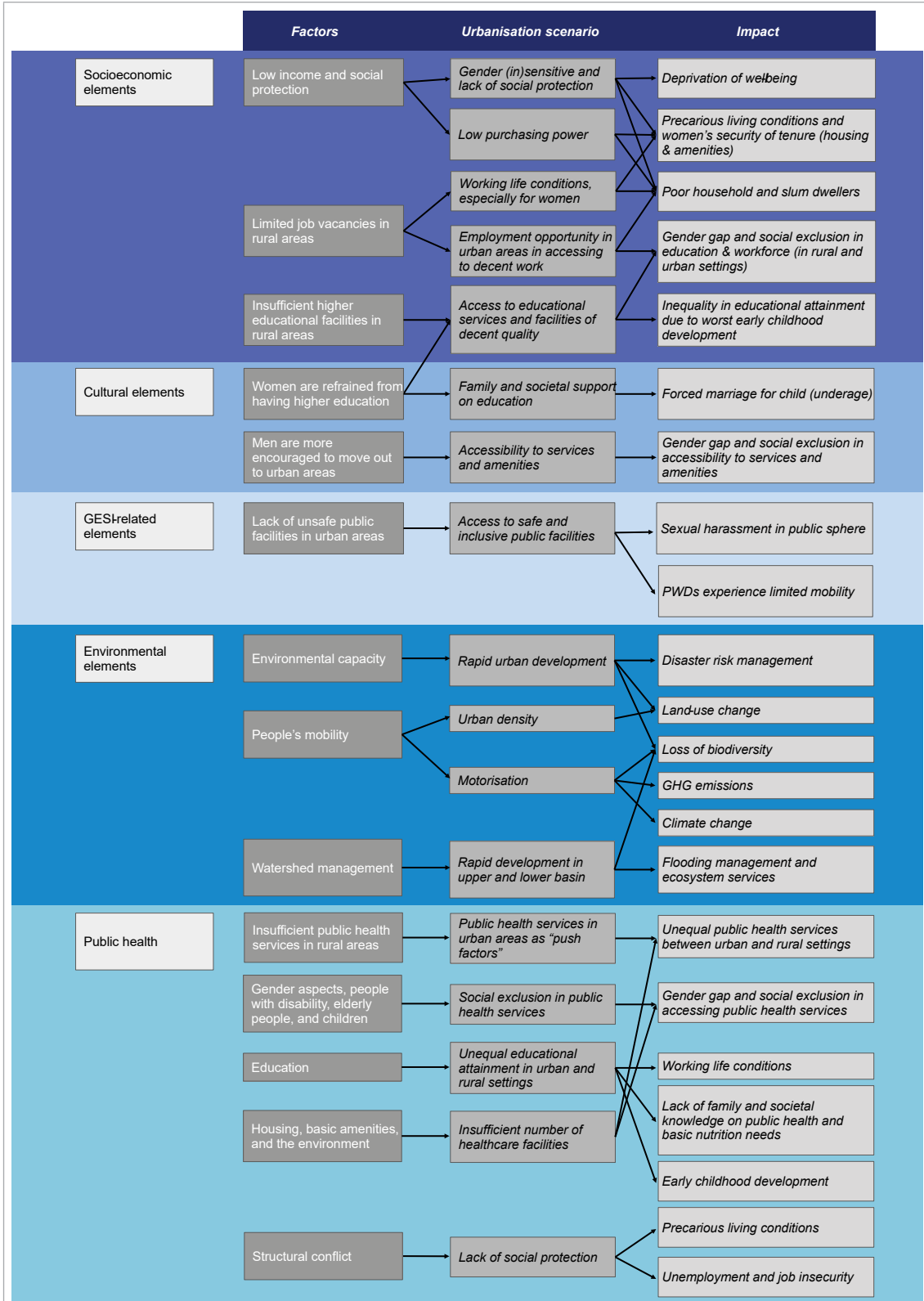


Figure 1.1. Conceptual Framework (Push and Pull Factors in relation with urbanisation scenario, impacts, and GESI-related issues)





2.

CURRENT SITUATION ANALYSIS IN AMS

2.1. Urbanisation Trend and Projection of Migration in ASEAN

2.1.1. Urbanisation and Migration

Looking at the global perspective, based on the most recent data of 2018 from the United Nations, Department of Economic and Social Affairs (UN DESA), Population Division (2018), 55.3% of the world's population reside in urban areas. In the last decade, the urban population at mid-year in AMS has risen around 69.7 million, making the global urban population around 341 million people. Furthermore, UN Desa (2018) forecasted that the urban population in AMS would increase up to almost 410.7 million in 2031. These numbers illustrate that more than 50% of the AMS total population resides in urban areas, rising 2-7% each decade.

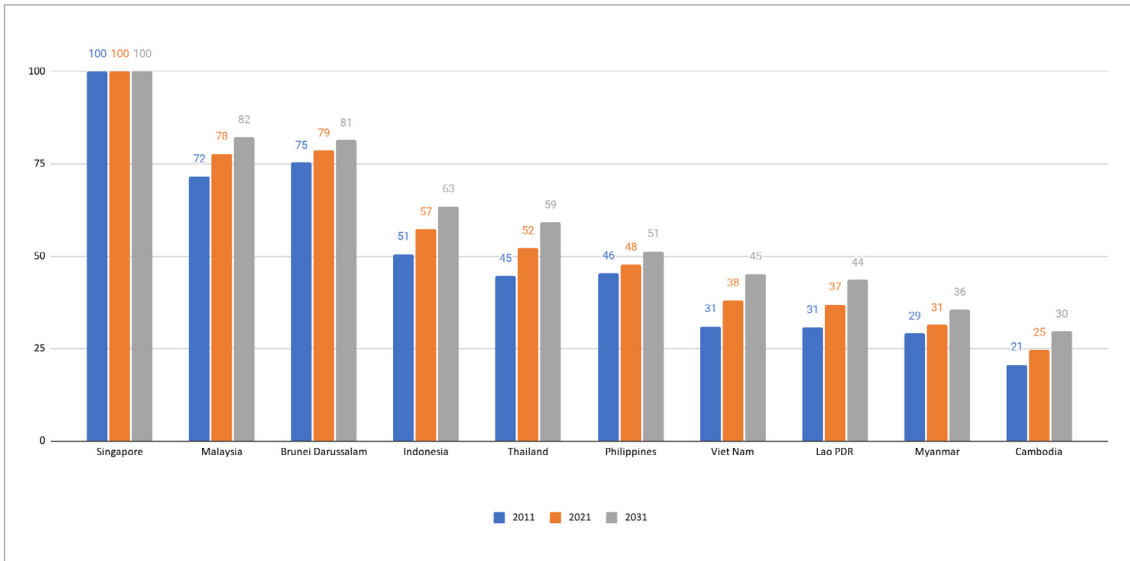


Figure 2.1. Annual Percentage of AMS Urban Population at Mid-Year in 2011, 2021, and 2031

Source: UN DESA, Population Division (2018)

Figure 2.2 shows the average rate of change for urban populations in AMS, which will mainly experience a decline in 2020-2025. This fact illustrates that the urban population growth in the countries mentioned above is slowing down.

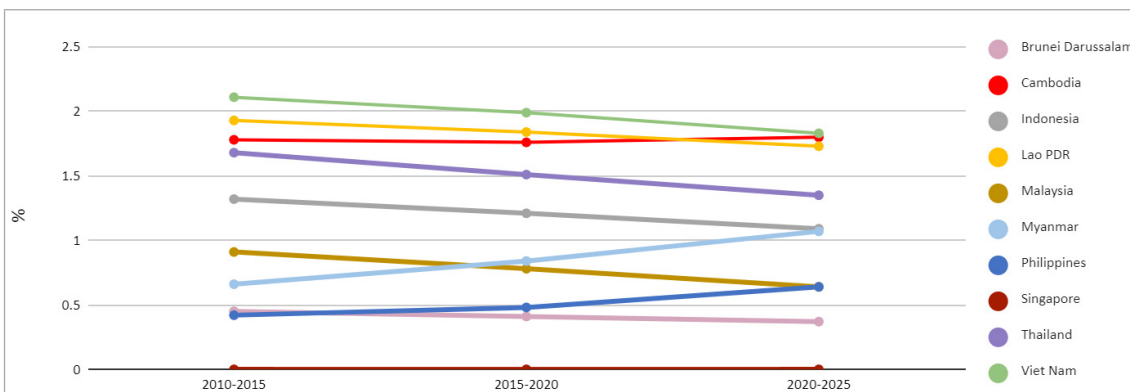


Figure 2.2. Average Annual Rate of Change of the Percentage Urban Across AMS in 2010-2015, 2015-2020, and 2020-2025

Source: United Nations, Department of Economic and Social Affairs, Population Division (2018)

Urbanisation can be caused by the natural increase of population in urban areas and rural to urban migration. A significant proportion of urban-rural and urban-urban migration contributes to rapid urban growth (UNESCO et al., 2018). Some AMS is also experiencing rapid urban growth caused by urban-rural migration. For example, a significant proportion of urban-rural and urban-urban migration of 24.5% and 12% respectively in Cambodia has led to rapid urban growth of 2.8% both in 2015 and 2016, while in Viet Nam, urban-rural migration (36.2%) and urban-urban migration (31.6%) led to the urban growth of 3.4% (ibid.).

While looking at the share of age groups in ASEAN, there is an indication of a shift in the ASEAN population structure in 2000 and 2018. In 2000, the highest share of the population was the youth aged 0-19 years old (40.8%), but in 2018 the share dropped to 33.9% (ASEAN, 2020a). On the contrary, the total share of the productive working-age group (aged 15-59) increased from 61.4% in 2000 to 61.8% in 2018, as well as the share of the elderly people (aged 65 and over) from 5.3% in 2000 to 7.5% in 2018 with the significant increase in Singapore (7.2% to 13.7%) and Thailand (9.1% to 12%) (ibid.). The increasing share of the productive working-age population in Brunei Darussalam, Lao PDR, Malaysia, Myanmar, the Philippines, and Viet Nam, brings the potential demographic dividends that could contribute to economic growth and poverty reduction (ibid.).

Table 2.1. Sex Ratio at birth in AMS in 2017-2019

Country Name	Sex ratio at birth (male births per female births)		
	2017	2018	2019
Brunei Darussalam	1,055	1,055	1,055
Cambodia	1,05	1,05	1,05
Indonesia	1,049	1,05	1,051
Lao PDR	1,05	1,05	1,05
Malaysia	1,03	1,03	1,03
Myanmar	1,06	1,06	1,06
Philippines	1,06	1,06	1,06
Singapore	1,073	1,073	1,073
Thailand	1,062	1,062	1,062
Viet Nam	1,123	1,118	1,113

Source: World Bank (2021)

The data as presented in this section substantially show two main phenomena in all AMS: urban populations have been increasing, and there is a relatively balanced ratio of the male and female population. In terms of migration these data also implicitly show a gendered dynamic in all AMS as those who migrate are people of both sexes - men and women - from various social and economic backgrounds. Therefore, comprehensive measures are necessary to ensure inclusivity i.e., that migration benefits both men and women, and leaves no one behind.

2.1.2. COVID-19 Impact on Urbanisation and Migration

Due to the COVID-19 pandemic, several measures the AMS took exacerbated the vulnerable groups' risks from social distancing and movement restrictions. In addition to the systemic challenges engulfing many sectors, the emergence of the COVID-19 pandemic in the first quarter of 2020 is increasingly threatening the sector's capacity to achieve productivity and revenue targets, resulting in a prolonged impact. The imposition of mobility restrictions and community quarantine lockdowns resulted in disrupting rural and urban systems, creating supply and demand shocks.

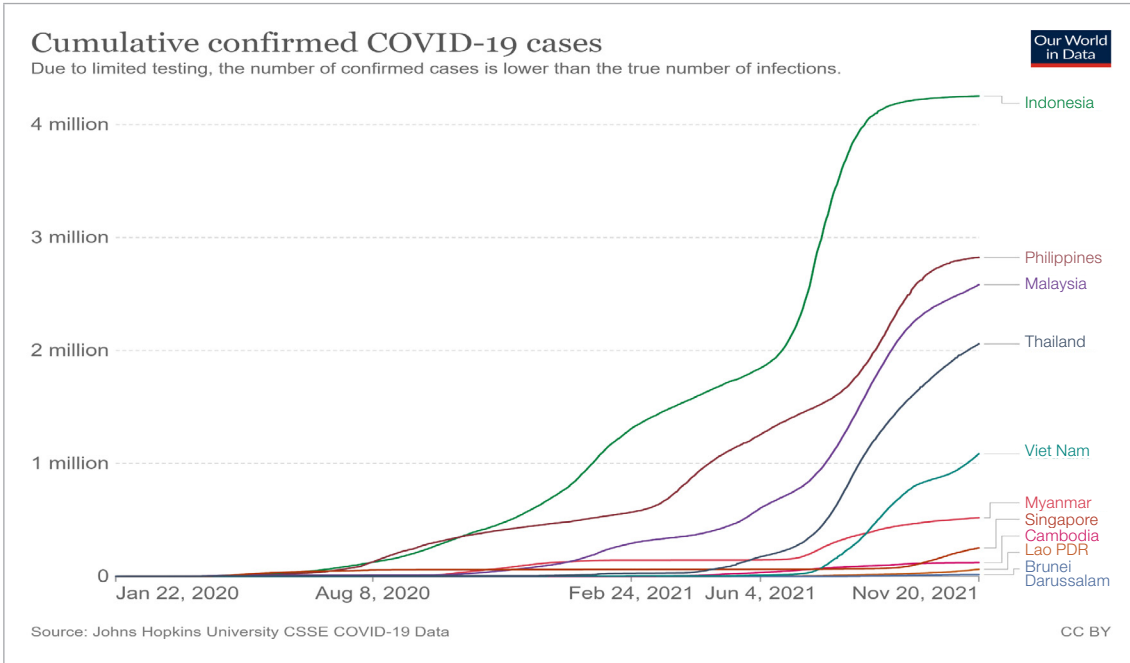


Figure 2.3. COVID-19 Epidemic Curve among AMS

Source: John Hopkins University CSSE COVID-19 Data, Date of Report 20 November 2021

Due to the population structure and mobility, migrants and workers in cities who are laid off face challenges finding employment in their respective home villages or returning to the cities for work. On the other hand, daily commuters who live in the sub-urban area also had difficulties returning to their workplace during the COVID-19 pandemic. These daily commuters are essential as many provide crucial services in the city centre. Moreover, COVID-19 has further revealed the apparent infrastructural deficit in healthcare systems of urban and rural regions in Southeast Asia. Many villages' health services and infrastructures are not ready to adequately support those infected by COVID-19. Hence, social assistance programmes can ease the burden on households during crises resulting from the COVID-19 pandemic, particularly for low-income families. But, due to the coordination issues, the social assistance to the poor households affected by the pandemic is not delivered timely or even do not receive social service in some rural areas. Overall, the coordination between urban and rural governments becomes more important than ever in times of pandemic and its effectiveness is tested (ASEAN Comprehensive Recovery Framework, 2020). Governments should ensure that social assistance benefits are distributed on time, especially before the impact of the crisis on poor households becomes too profound.

Given the scale and impact of the pandemic, handling the crisis requires coordinated action and cooperation with its partners related to urban-rural linkages. While the region's top priority is tackling the pandemic, it must simultaneously consider long-term and collective socio-economic recovery strategies (ACRF, 2020). The response through the various stages of recovery must be focusing on the key sectors and segments of society most affected by the pandemic (both in urban and rural areas), establish broad strategies, and identify recovery measures in line with sectoral and regional priorities.

2.2. Urban-Rural Continuum

The definition of 'urban' differs across countries contextual to their countries' situations (see Annex I for 'urban' and 'rural' definitions in AMS). In further defining and distinguishing between urban and rural areas, most statistics define urban "traditionally" according to density. For example, OECD (2010) distinguishes regional strategy between predominantly urban regions (percentage of the population living in rural local units <15%), intermediate regions (percentage of the population living in rural local units >50%), and predominantly rural regions (percentage of the population living in rural local units 15-50%) by first classifying regions at local units as rural if the population density is less than 150 inhabitants per square unit (500 inhabitants for Korea and Japan). In the United States of America, the Census Bureau proposes to determine whether a census block qualifies for inclusion in an urban area by adopting a housing density threshold of 385 housing units per square mile, replacing the use of population density (Bureau of the Census, 2021).

The differences in the definition of urban across countries can also be seen clearly from the concepts used to estimate their city and population data, pointed out by UN DESA (2017). The concept of 'city proper', which refers to the area confined within city limits, is used by 38% of countries. Another concept of 'urban agglomeration' is used by one-third of countries, while another 12% only for their capital cities, and 5% of countries use the 'metropolitan area' concept. The urban agglomeration concept integrates the 'city proper' concept and suburban areas that are part of city boundaries, whereas multiple jurisdictions and municipalities, including satellite cities, towns, and intervening rural areas that are tied socio-economically to the urban core are included in the 'metropolitan area' concept. Thus, in certain ways, there are needs to revisit the definition that includes density only by using the degree of urbanisation that classifies local administrative units (LAUs) into cities (densely populated area), towns, and suburbs (intermediate density area), or rural areas (thinly populated area) by combining population size and density threshold to capture the full settlement hierarchy (European Commission, ILO, FAO, OECD, UN-Habitat, and World Bank, 2020). This method has two hierarchies: the degree of urbanisation level 1 and level 2, with level 2 being a sub-classification of level 1 to further identify medium and small settlements (e.g., towns and villages) (ibid.).

The implication of the urban-rural definition, which tends to be dichotomous, makes urbanisation seem like a process of change from rural to urban. Urbanisation is a complex process, and it shows through the emergence of transition areas. The distinction between the 'urban' and 'rural' is more than just about migration flows between the two regions. It is important to understand the different contexts and characteristics between the 'urban' and 'rural' areas to see the urban-rural linkage and complexity within the urban-rural continuum.

Urbanisation has become a key factor in the development process including economic growth in various countries (Nguyen & Nguyen, 2018). Urbanisation has the potential to accelerate economic growth, and this potential will depend on the establishment of favourable institutions and investments in appropriate public infrastructure. Rob & Talukder (2012) stated that the process of urbanisation involves the concentration of power, investment, production, and services at centres of growth.

Urbanisation is one of the driving forces on the land-use change almost always involves converting land use from non-urban to urban services (Nuissl & Siedentop, 2020). Additionally, the visible outcome of land-use change due to urbanisation is the spatial expansion of built-up areas (ibid.). In the ASEAN region, the built-up area has increased 0.41% over 39 years, increasing each AMS ranging from 0.05-2.29%. The three AMS with the highest change in the built-up area is Singapore with 2.29%, Viet Nam with 0.97%, and Thailand with 0.82%. On the contrary, Lao PDR has the lowest change of the built-up area (0.05%) over the period (see Table 2 in Annex II).

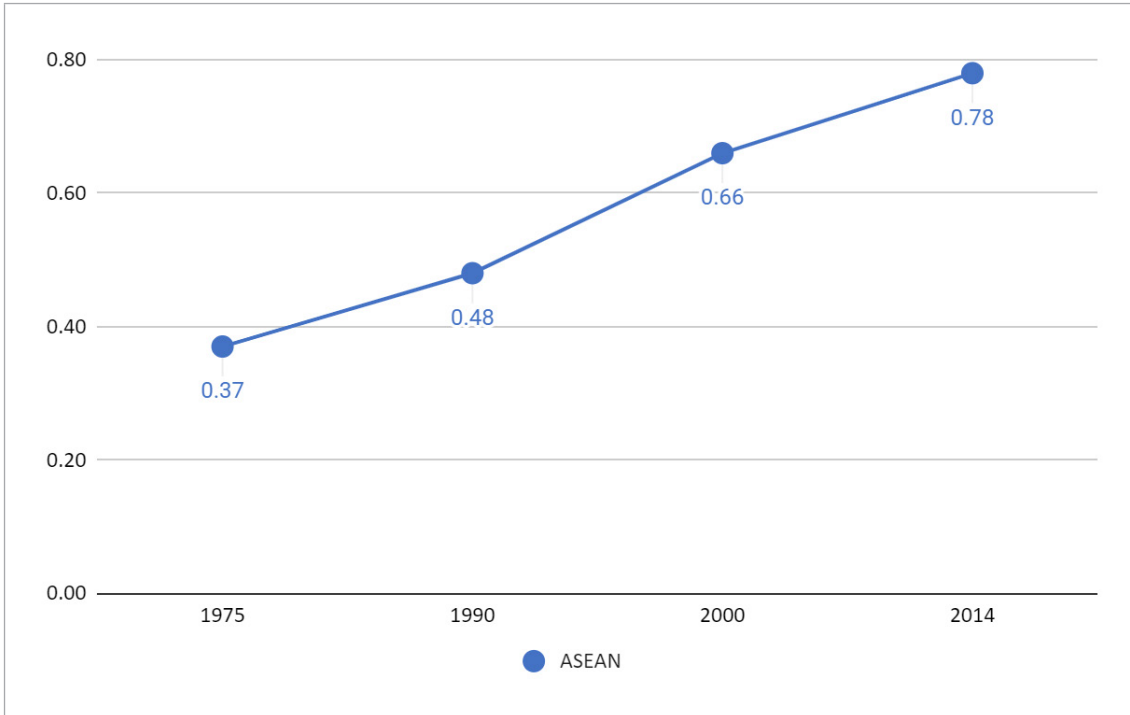


Figure 2.4. Built-up area change in the ASEAN Region (percent of the total land)

Source: OECD, 2022

AMS have a variation of the drivers of urbanisation, depending on the region's policies and development. This section presents the results of systematic literature review (SLR) and focus group discussions findings as a way to observe the variation of urbanisation patterns as well as the dynamics of the cities (e.g. main and intermediate cities) in the ASEAN region. The findings from the SLR will be used to confirm the findings obtained through FGDs. The analysis only covers main cities, intermediate cities, market towns, villages, and settlements in AMS that were found in the literatures examined in this study.

Through the SLR, it is found that urbanisation in the ASEAN region is mainly driven by urban population and economic growth, which creates more job opportunities and results in the fast development of the area. Industrialisation, FDI, free-market economy, even country-specific economic policies are examples of factors resulting in the economic growth of the countries in the ASEAN region. Moreover, decentralisation in several AMS also boosted the urbanisation process and economic growth as the local government has the power and authority for the decision-making of its level of administration. These factors influenced the urban growth and the extensive population growth often resulted in the expansion of the urban area, emerging peri-urbanisation, suburbanisation, and other transformation areas in the rural areas surrounding the urban areas.

The SLR findings are also confirming the major trends shaping urbanisation in ASEAN captured in the ASEAN Sustainable Urbanisation Strategies. Urbanisation is rising (particularly in middleweight cities) can be observed in Indonesia (Semarang, Surakarta, Bekasi), Thailand (Nakhon Ratchasima, Isaan Region, Udon Thani), and Viet Nam (Dong Mai), where industrialisation is the main influence of the process in most of the cities. Cities are also becoming increasingly independent, and it is supported by the decentralisation policies in countries (e.g. Indonesia, Thailand). Urban sprawl emerging from the urbanisation process is creating concerns for congestion, economic efficiency, and cultural heritage as can also be observed through the case study of George Town, Malaysia.

Table 2.2. Drivers of Urbanisation in AMS

No	Country	Drivers of Urbanisation	
		SLR	FGD and written responses
1	Brunei Darussalam		Infrastructure development such as wastewater infrastructure and roads are two of the main sectors leading to urbanisation. Higher people's mobility in the urban areas resulted in the higher number of privately-owned vehicles.
2	Cambodia	Economic growth due to FDI, increasing landlessness, rapidly expanding labour force, significant wage difference between urban and rural areas, rural poverty, environmental degradation in the rural region.	Fast development creates more opportunities in urban areas and many of them are heavily influenced by FDI. Expansion of capital city and satellite cities in Phnom Penh are also main factors of urbanisation in Cambodia.
3	Indonesia	Urban expansion of the existing megacity, industrialisation, transmigration programme, roles within its surrounding regions, decentralisation.	Economy, more opportunities to improve living standards.
4	Lao PDR		Investment promotion, digitalisation, and industrialisation creates more opportunities and results in rural-urban migration; policy supporting investment and FDI (e.g. social-economic zone).
5	Malaysia	Urban expansion, industrialisation and commercial activities, better infrastructure and services provision.	Population growth, economic growth, changing of living standards and the availability of employment opportunities, public services and social benefits.
6	Myanmar	Urban population growth as a result of the free-market capitalist system.	Employment opportunity, better education and health services and accessibility, better basic infrastructures.
7	Philippines		Economic zone, labour intensification, industrialisation, good education services, employment opportunity.
8	Singapore	Singapore is a highly-planned city-state, in which the entire island has been classified as urban.	
9	Thailand	Decentralisation, economic development due to development of the industrial sector, large retail enterprises, tourism attractions, roles within its surrounding regions, better services and commercial activities.	Industrialisation, the fall of agriculture, rural poverty, better infrastructure.
10	Viet Nam	Increasing commercialisation of agriculture and the replacement of labour with capital investment, FDI, the creation of investment zones, infrastructure development.	Industrialisation, economic growth.

Source: Research team's analysis, 2021

2.2.1. Urbanisation Dynamic of Main Cities in ASEAN

Main cities in the AMS have continued to flourish due to the advantage and opportunities that urbanisation brings. For instance, economic growth as the main driver of urbanisation can be observed in Ha Noi and Ho Chi Minh in Viet Nam, Cambodia, and main cities in the Greater Mekong Sub-region (Kontgis, et al., 2014; Li, Wei, & Korinek, 2018; Gangopadhyay, Jain, & Suwandar, 2020; Nong, et al., 2021), one of which is due to the FDI flows.

Urban expansion, peri-urbanisation, and the forming of urban corridors have transformed the formerly rural areas into newly urbanised region. (Bosquet, 2015; Pribadi & Pauleit, 2015; Winarso, Hudalah, & Firman, 2015; Hadi et al., 2018; Samat et al., 2019; Ortega, 2020; Rustiadi et al., 2021). In the case of the Jakarta Megacity, Indonesia, it is found that the area keeps expanding instead of shrinking after passing the peak of urbanisation growth period (Rustiadi, et al., 2021). Meanwhile, the growth of both Jakarta and its nearby metropolitan city, Bandung, resulted in the forming of two mega-urban corridors in the North and South parts as the urban growth continued towards the suburban areas (ibid.).

Peri-urban and suburban landscapes' spatial patterns are known to be closely associated with their socio-economic characteristics (Nong, et al., 2021). Many housing projects are built in suburban areas due to vacant lands and lower land prices whereas the rapid development of housing in the peri-urban areas is usually influenced by the non-integration of regional infrastructure networks with peri-urban settlement development projects due to private developers' priorities on building housing only and not improving the infrastructure (ibid.). This transformation process shaped the peri-urban areas in Ha Noi and suburbs in Manilla (Nong, et al., 2021; Ortega, 2020). In the Jakarta Metropolitan Area (JMA) the population density within the metropolitan areas' settlements decreased and showed a movement of the population from core to inner zone and peri-urban areas, forming Jabodetabek metropolitan area (Pribadi & Pauleit, 2015; Winarso, Hudalah, & Firman, 2015).

Unlike the main cities in other AMS, in the case of Singapore, a highly planned city-state, urbanisation is high. Within the limited land area of Singapore, the planning system addresses the needs of the growing population, the city, and the nation. As a highly urbanised city-state, Singapore's infrastructure is one of the critical aspects for faster economic growth and alleviation of poverty in the country. Singapore has demonstrated the strength and legitimacy of its planning in guiding its spatial changes through the city-state's transformation over the decades (Yuen, 2009).

Tremendous development and economic growth have triggered the movement of people, particularly them looking to improve their living standards and bring transformation to the city. However, on the contrary to its positive impacts, including more job opportunities, infrastructure improvements, and improvement in people's living standards, it also brings disadvantages, including unequal development, the social conflict between communities, environmental damage, traffic congestion, and reduction of agricultural land area (Samat et al., 2019).

2.2.2. Urbanisation Dynamic of Intermediate Cities, Market Towns, Villages, and Settlements in ASEAN

Urban growth in the intermediate cities in AMS is driven by urban expansion due to the growth of population, development of industrial activities in the main cities, decentralisation policy, and peri-urbanisation. Specific government policy, for example, the transmigration programme in Indonesia also has a part in the emergence and development of intermediate cities, villages, and settlements. Urban growth in the areas where the transportation system is developed is also observed in the analysis.

According to the data available of 122 urban agglomeration areas with a population of 300,000 and more in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam (see table 1 in Annex II), 43 areas are projected to have the same percentage of the urban population, 43 areas will have an increase in the percentage, and 36 areas will experience a decrease in the percentage in 2025 if compared to 2010. The data also includes the capital city of the aforementioned AMS, and it showed that several capital cities will also experience a decrease in the percentage of urban population residing in the urban agglomeration in 2025, including Phnom Penh, Vientiane, and Manila. Semarang Mega Region (SMR), Bekasi Regency, and Surakarta in Indonesia are several examples of urban expansion resulting from industrial activities (Kurnia, Rustiadi, & Pravitasari, 2020; Buchori, et al., 2020; Buchori et al., 2021). The development of the factories has fuelled the growth of residential areas and other supporting activities in the vicinity and affected the local people in social, economic, cultural, and environmental ways (Buchori, et al., 2020). While in Viet Nam, Nguyen & Kim (2020) emphasised that the rise of non-agricultural activities on the city's outskirts, particularly in Dong Mai, is essentially the result of the urbanisation process. Spatial transformation of the area involves increasing the diversification of farmers' livelihoods. Viet Nam's land acquisition and agricultural land equity policies have resulted in fragile agricultural land market operations, making agrarian land less attractive and farmers looking for other income sources.

Rapid development of peri-urban areas, particularly in Port Numbay, Banjar City, Yogyakarta, and Cirebon in Indonesia (Korwa, et. al, 2021; Mardiansjah, Rahayu, & Rukmana, 2021; Supriyadi, et al., 2020; Divigalpitiya & Nurul, 2015; Fahmi, et. al, 2014) and Nakhon Ratchasima in Thailand (Thebpanya & Bhuyan, 2015) are influenced by decentralisation policy. Decentralisation policy mainly enables rapid development as local governments can more easily authorise and promote it. However, the gap in access to infrastructure, facilities, goods, and services between peri-urban and core-urban due to the decentralisation programme has resulted in inadequate service facilities as observed in Port Numbay (Korwa et al., 2021). Specific government policy, for example, the transmigration programme in Indonesia, also has a part in the emergence and development of intermediate cities, villages, and settlements in Port Numbay (Korwa et al., 2021). One of the objectives of the transmigration programme in building new settlements is to allow the mixing of foreign transmigrants and local Papuan communities (ibid.). However, the rural-urban changes in the local area are not always due to population migrations to larger urban areas, instead due to the people's lifestyle, which becomes more urbanised, observed by Buchori, et al. (2021). In the case of SMR, the development of industrial activities in the peri-urban areas resulted in the arrival of migrants, who were primarily industrial workers, and their interaction with the local people brought about various changes, especially related to social patterns and lifestyles (ibid.).

The growth of intermediate cities in Thailand, particularly in Nakhon Ratchasima Province and Udon Thani, also took place in the transportation routes development (Thebpanya & Bhuyan, 2015; Phuttarak & Dhiravisit, 2014). Urban areas continued to expand as the Thai government implemented the decentralisation policy to increase the local government authority to support its economic development within the region (Thebpanya & Bhuyan, 2015). Gullette & Singto (2018) argued that decentralisation may create equitable and sustainable development initiatives under ideal circumstances, accommodating diverse interests, actors, and agendas in a given region. However, peri-urbanisation often advances unexpectedly (at times contributing to ecological degradation) and creates tensions between different actors with different interests, including those with varying levels of political influence, to move their agendas. Thai socio-economic development and urbanisation

policies simultaneously integrated social and environmental sustainability as discursive frames into policy documents.

The urbanisation process of Udon Thani has developed on the Commercial Oriented, which is a conductor of city expansion similar to other major cities in Thailand (Phuttarak & Dhiravisit, 2014). As Udon Thani is located in a strategic area of the Indo-China region, in the present, the industrial sector, large retail enterprises, or even tourism attractions are developed rapidly to support the economic growth of Udon Thani. The urbanisation process and land acquisition impact is experienced in the Isaan region (Gullette, Thebpanya, & Singto, 2018). Due to the socio-political and economical in Isaan and other parts of Isaan, they are experiencing economic vulnerability due to widespread drought, the decline in agricultural yields, political instability, and economic uncertainty that impacts agrarian families. Impacts such as the reduction of agricultural land, especially the type of land and diversification of labour due to urbanisation indirectly affect the condition of domestic workers and the growth of the industry there because it has increased the value of the land.

Asia's process of urbanisation is characterised by the development of large cities with surrounding industrial zones and its role to develop the nation's economic growth, and the more urban a country is, the greater its GNP per capita (ibid.). Moreover, the challenge of Asia's future urban growth is the provision of basic public services and infrastructure as urban growth will occur in midsize cities (ibid.). Urbanisation dynamics in the intermediate cities has shown the importance of these cities in supporting the socio-economic activities and urban development of the main cities in AMS. Thus, it is essential for policies to address the significant growth of intermediate cities, which has the possibility to be the centre of growth in the future, and its implication to rural developments.

2.2.3. Urban-Rural Linkages

UN-Habitat (2019) defines urban-rural linkages as the nonlinear, diverse interaction and connections between urban-rural regions. Urban-rural associations include flows of people, goods, capital, services, and information between urban and rural areas (ibid.). For example, rural areas can act as a supplier for raw materials (e.g. agricultural products), which then the raw materials will be processed or manufactured in the urban areas. At the same time, urban areas also have a part in the linkage by providing services or products and imported goods to the rural areas. Besides commodities, the aspects of urban-rural flows can also include people, production, capital/income, information, natural resources, and waste and pollution (Allen, 2003 based on Douglass, 1998:31).

The economic and social change brought forces to the rural areas, resulting in the economic and spatial transformation into a more urbanised area. Regional agglomeration due to population and activity integration with the urbanised area is seen as an opportunity mainly due to the resources provided in rural areas. Strengthening urban-rural linkage is vital in reducing the disparities between urban and rural areas and achieving sustainable development targets.

Rapid urbanisation in the ASEAN region threatens food security due to land conversion into the built-up area and an increasing number of populations. Although there is no clear data indicating what type of land converted into the built-up area, the data available of the percentage of agriculture land area within the AMS showed a fluctuation in the agricultural area compared throughout 2011-2019 (Figure 2.5). The rural area also acts as a source of labour supply for urban areas at the national and international levels (Maneepong, 2012). The increase of regional and rural-urban migration contributes to the availability of an inexpensive

labour force (both unskilled and semi-skilled labour) in urban areas, contributing to the lowering cost of manufacturing (ibid.). The movement of people from rural to urban areas, especially for employment and improving living standards, poses a threat to the number of populations living in rural areas. Figure 2.6 illustrates the average annual rate of change of the rural population in the ASEAN region, which experiences a decline throughout 2010-2035.

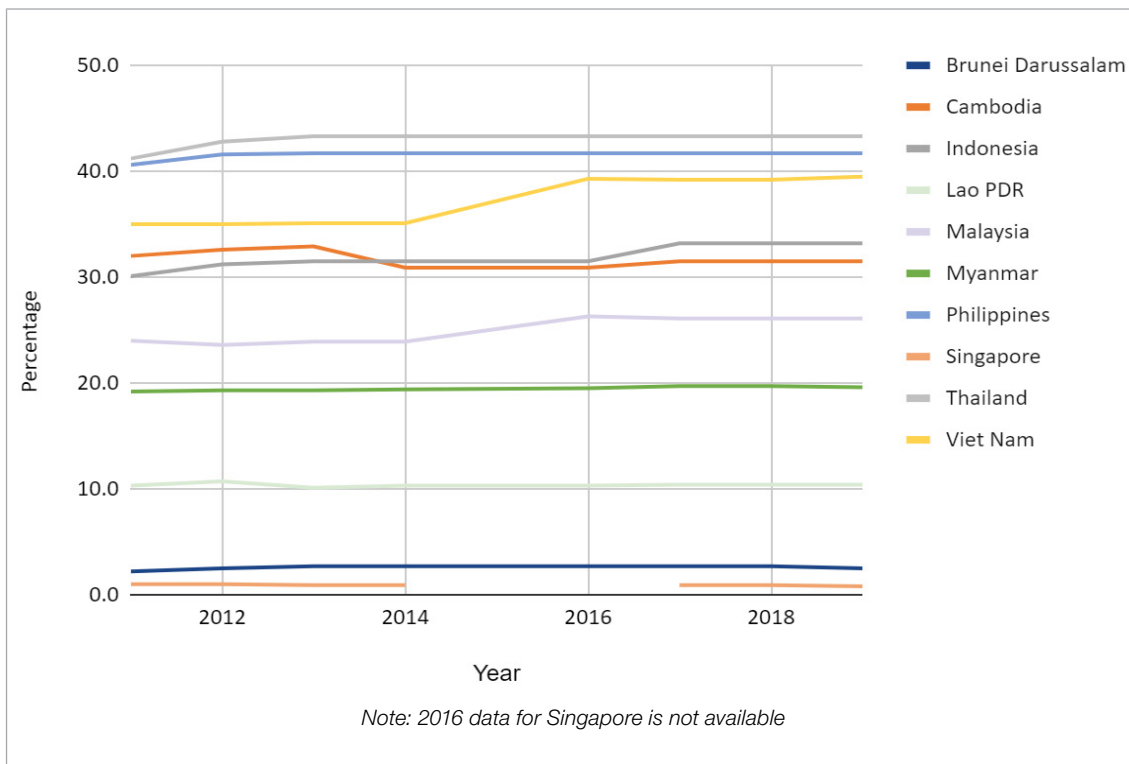


Figure 2.5. Percentage of agriculture area to land area

Source: ASEAN Statistical Yearbook, 2013-2020

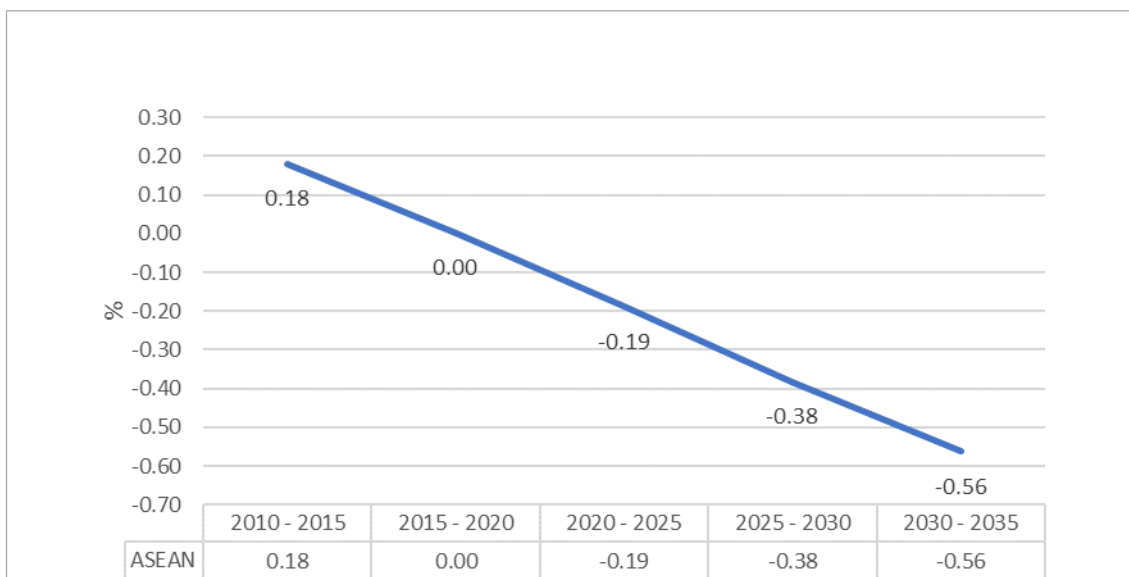


Figure 2.6. Average annual rate of change of the rural population (percent)

Source: UNDES, 2018

Some strategies in rural development, such as diversifying from agriculture to non-agricultural rural activities, are also considered essential to achieve sustainable economic growth in many AMS. There could also be gains to foreign trade and increased engagement in regional supply chains (ASEAN, 2021a). Urban-rural flows in the form of people, capital/income, and information have illustrated the SLR findings, in which the urban expansion and/or urbanisation pattern is influencing the movement of the people from urban to rural areas and resulting in the development of both urban and rural areas as well as knowledge and skill exchange between the migrant and local people.

2.3. Situational Analysis in ASEAN

2.3.1. Economic Growth, Poverty, and Non-Inclusive Growth

2.3.1.1. Economic Growth

In 2019, the total combined GDP of AMS was valued at US\$3.2 trillion, placing ASEAN, collectively, as the fifth largest economy in the world. Contributing to the share of GDP is the three main sectors, namely agriculture (including farming, fishing, and forestry); industry (including manufacturing, electricity, gas and water supply, construction, as well as mining and quarrying); and services (including trade, government activities, communications, transportations, finance, and other economic activities not producing goods). During the period of 2015-2019, services were the leading sector in the ASEAN economy, contributing from 49.2% to 50.6% shares to the total of ASEAN's GDP (ibid.). On the contrary, agriculture and industry contribution to the total of ASEAN's GDP decreased from 11.1% to 10.2% and 37.1% to 36%, respectively, over the same period (ibid.).

As for the GDP per capita, over the period of 2014-2019, GDP per capita across AMS has been experiencing an increase overall, meaning that the economy in ASEAN is growing and not recessing. In 2019, Singapore and Brunei Darussalam recorded the highest value of GDP per capita within the AMS at US\$65,232.9 and US\$29,343.3, respectively (ASEAN, 2020a). The most significant improvement was observed in Cambodia, where GDP per capita increased by 48.21% over this period, followed by Lao PDR (35.7%) and Viet Nam (32.78%) (ASEAN, 2020b).

The growth of the urban economies within the AMS is also expanding, not only in the mega-cities such as Jakarta, Bangkok, and Manila, but also in the so-called middleweight regions (see Annex I for definitions) (ASEAN, 2018). The growth of the urban economies is caused by cross-border trade logistics which benefited AMS from all types of global flows given its proximity to India, China, and Japan; various types of economic clusters in ASEAN, which drives exports and attracts FDI; and satellite regions (ibid.).

2.3.1.2. Poverty and Non-Inclusive Growth

Urban-rural migration is usually driven by the desire of people to improve their living standards, however, if poorly managed, rapid urbanisation, coupled with high numbers of migrants moving into cities and a lack of matching governance capacity, tends to form significant urban poverty and inequality that impact the urban population directly. Over the years, the Gini index of AMS regions has been

fluctuating. data from the World Bank (2021) shows that the Gini index of Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam fluctuates between 30-45% from 2011 to 2019. The Gini index of Malaysia and the Philippines has stayed over 40% and is considerably higher than the other AMS (ibid.), which indicates that there is greater inequality in Malaysia and the Philippines if compared to Indonesia, Lao PDR, and Myanmar. Furthermore, income inequality in urban areas is often found higher than in rural areas, and this is not limited to only large cities (ASEAN, 2018a).

There is a need to look at the multidimensional poverty index (MPI), which identifies how people are being left behind across three key dimensions: health, education, and standard of living, comprising 10 indicators. In the ASEAN region, the percentage of the population living in multidimensional poverty decreased from 9.7% in 2015 to 9.5% in 2017 (UNDP, 2019a). Looking at each AMS, based on the data available of Cambodia, Indonesia, Lao PDR, the Philippines, and Thailand from UNDP & OPHI (2021), it showed that the value of the MPI in the aforementioned AMS decreased over time as well as the number of populations living in multidimensional poverty (see Table 3 in Annex II). In 2021, MPI value in AMS, including Cambodia, Indonesia, Lao PDR, Myanmar, the Philippines, Thailand, and Viet Nam varies from 0.002 in Thailand to 0.176 in Myanmar (see Table 4 in Annex II). On the contrary to the income inequality, the proportion of the population living below the national poverty line (SDG indicator 1.2.2) is often found higher in rural areas compared to urban areas (ASEANstats, n.d.)⁶. However, the trend of the indicator showed improvement in the proportion of the population living below the national poverty line, both in urban and rural areas.

The composition of the largest group of poor also differs in one country and another. In Cambodia, Indonesia, Lao PDR, Thailand, and Viet Nam, the trend of the largest group of poor is found in rural areas, mostly without full-time jobs (ESCAP, 2018). The poor in Cambodia, Indonesia, Lao PDR, Myanmar, and the Philippines also tend to have families of their own, in which they receive no benefits and are oftentimes without access to affordable childcare facilities. (ibid.).

Rapid urbanisation also pressures the local governments to provide adequate infrastructure, housing, and public services. As the urban area develops further, the increase in property prices becomes inevitable which then displaces poorer city-dwellers and forms informal settlements (slums) in urban areas.

Based on the available data for Myanmar, Cambodia, the Philippines, Indonesia, Thailand, Lao PDR, and Viet Nam, the percentage of people living in slums range widely from 13.8% to 56.1% in 2018. Cambodia, Thailand, Lao PDR, and Viet Nam are experiencing a decrease in the percentage of people living in slums in 2016 and 2018. However, in 2016, Myanmar had the biggest increase in the percentage of people living in slums (15.6%). Besides Myanmar, the percentage of the population living in slums in 2016 and 2014 is also higher in the Philippines and Indonesia.

⁶ Based on the data available in Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Thailand, and Viet Nam.

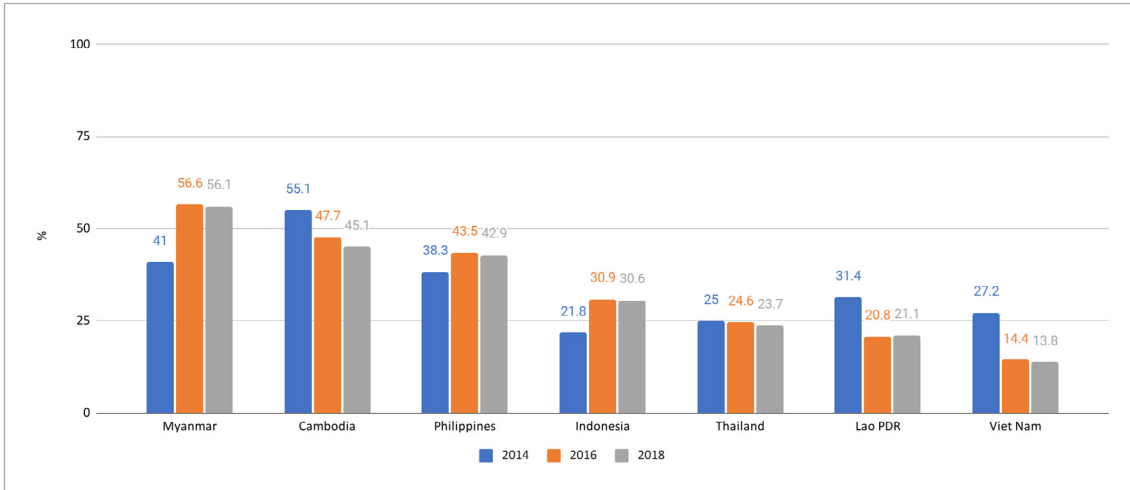


Figure 2.7. Population Living in Slums (% of Urban Population) in 2014, 2016, and 2018

Source: World Bank, (2021)

2.3.2. Education and Employment

2.3.2.1. Education Access in Urban-Rural Settings

On the path to achieving SDG number 4 on education, Southeast Asia is a region that scores relatively well on education, advanced than most developing countries and ahead of the other sub-regions of Asia (Ingram, 2020). The distribution of educational opportunities must be monitored to ensure that education plays a role in reducing and not exacerbating urban and rural inequalities.

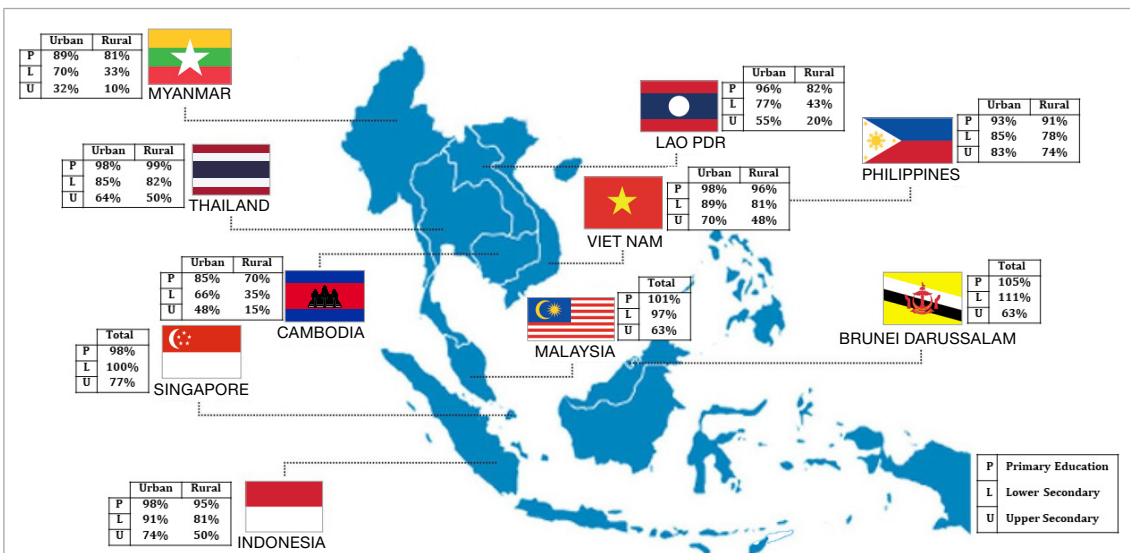


Figure 2.8. Completion Rate for Primary, Lower Secondary, and Upper Secondary Education in AMS According to Urban and Rural Settings

Source: Modified data of UNESCO, Institute for Statistics (UIS) Database (2020)

Looking at regional variation within countries, students in urban and rural communities complete primary school at almost the same rate in Indonesia, the Philippines, and Viet Nam, but rural dwellers show measurable disadvantages in Cambodia, Lao PDR, and Myanmar, which performs low score in especially in rural areas. The

same ranking exists for lower secondary completion, with rural students in all seven countries dramatically underperforming their urban peers at the upper secondary level.

Through its commitment to ASEAN Socio-Cultural Community, ASEAN aimed to foster inclusive and quality education for the sustainable development of the region. Quality education leads to better health outcomes, higher social capital, peaceful and gender-equal societies, and decent work opportunities. It prepares ASEAN's human resources to be resilient, competitive, and ready to face an ever-changing future. Quality education, which is essential to real learning and human development, is influenced by factors both inside and outside the classroom, from the availability of proper supplies to the nature of a child's home environment. Adequate facilities and infrastructures in education are essential to improve the quality of the teaching and learning process (Siswanto & Hidayati, 2020).

As a fundamental element of learning that needs to be developed, school infrastructure is a facility that can affect student learning effectiveness (Nugroho & Wibowo, 2019). In AMS, insufficient availability of schools is a critical barrier in rural and remote areas, with transportation issues often cited by governments as a limiting factor for providing an adequate supply of schools. Schools are often incomplete when available in rural areas, only providing specific grades or multi-grade classes. Poor infrastructure and services, particularly water and sanitation, are likely to deter children from attending, especially girls, as security and safety are key concerns (UNICEF EAPRO, 2019). In some cases, the rural-urban gap may be compounded by differences in poverty incidence; therefore, the rural poor are less advantageous.

2.3.2.2. Employment as Urban Pull Factors

The differences in socio-economic opportunities drove people to migrate to the city. One of the primary reasons for migration was employment opportunities and associated income and facilities.

As the central force of urban growth, the close relationship between urbanisation and agglomeration of the economy is one of the pull factors of migration from rural to urban areas. The migration flow is caused by push factors in the origin and destination areas; physical, social, economic, and cultural factors. In addition to the push factors, urban attraction such as multifaceted infrastructures and employment and security are the pull factors for people to migrate. Migration is motivated by improving living standards, and migrants move to places with better economic opportunities. In addition, several factors which triggered people to move from rural to urban areas showed on the table below.

Table 2.3. Urban and Rural Migration Factors in AMS Country

	Reason doing migration (rural to urban)					
	Following Family	Employment	Education	Marriage or Divorce	Environment	Other Reason
Cambodia	42,20%	18,40%	1,40%	21,80%	-	-
Lao PDR	18,30%	28,00%	14,90%	10,00%	-	-
Malaysia	46,50%	21,40%	3,70%	5,70%	21,60%	1,10%
Myanmar	40,80%	34,30%	2,20%	15,70%	-	0,70%

	Reason doing migration (rural to urban)					
	Following Family	Employment	Education	Marriage or Divorce	Environment	Other Reason
Thailand	33,20%	34,70%	6,40%	-	-	17,50%
Viet Nam	25,50%	34,70%	23,40%	-	-	-

Source: UNESCO, 2019

Migration flows are primarily caused by economic reasons to pursue employment and other financial opportunities, this phenomenon happen in most AMS, including Indonesia, Lao PDR, Thailand, The Philippines and Viet Nam, even though the percentage data only available in six countries. In Lao PDR, employment is one of the most significant factors that triggered movement from rural to urban. Lao people tend to transfer workplaces, search for jobs, or pursue a business as their primary motivation for migration (Lao Statistics Bureau 2016). It goes the same with Thailand, the comparable numbers of factors also varied significantly which dominate by 34.7% moved for employment (Thailand Government Survey, 2016). In Thailand, people with better health and education tend to migrate more (Katewongsa, 2015), and migrant workers with higher levels of education have more chances of finding better quality employment. In Viet Nam, both male and female migrants consider employment-related purposes the main reason for migration (34.7%), even though men are more likely to migrate for work and women for non-work purposes, such as family or study (Viet Nam General Statistics Office 2016). In other countries, such as Indonesia and The Philippines, employment also became major factors, even there is limitation on explicit data about it. In these countries, urbanisation is inevitable and irreversible, leading to an unbalanced urban population. In recent years, the most dominant migration trend in Indonesia and The Philippines has been toward the urban, or more accurately the suburban, areas adjacent to Jabodetabek and Metropolitan Manila, respectively.

Families that participate in permanent rural-urban migration are motivated by better wages, education, and healthcare access in cities (UNICEF 2011). The rest countries including Cambodia, Malaysia, and Myanmar has diverse urban pull factors, but people tend to follow families as the primary reason for migration. However, in Cambodia, the availability of extensive employment opportunities in Phnom Penh has triggered an urban-rural exodus. Migration to Phnom Penh, which absorbs about half of all migrants to urban areas, move for employment-related purposes. In Malaysia, a study conducted by Yusoff (2016) showed that income and employment do not affect the economic sustainability of the urbanisation process. For Myanmar which have unique pattern of migration, the tendency to do inter-urban migration is more likely to happen than urban-rural migration due to dry zone area. Interestingly, almost half of all lifetime migrants to Yangon and Mandalay come from other urban areas. It reflects a higher rate of urban-urban migration – with 773,414 migrants moving within Yangon’s four Districts – than rural-urban migration (Su Ann Oh, 2019).

For the countries which are highly urbanised, such as Singapore and Brunei Darussalam, the patterns are different. In Singapore, the residents of rural villages were gradually resettled in high-rise government apartments, which led to substantial changes. Meanwhile in Brunei Darussalam, people intended to conduct temporary movement, e.g. living in rural areas but working in urban areas because the location between both settings are close and reachable. The Brunei Governments take into account rural development by providing access and opportunities while at the same

time empowering the people to provide for themselves, this effort led Brunei to get awards as ASEAN leader in rural development in 2017.

2.3.3. Health Issues in AMS

Urbanisation means significant changes in people’s lifestyles, diets, and multiple environmental factors exposed (Phillips DR, 1993). The previous notion of rural and urban health was the idea of an “epidemic transition” that occurs as the population moves from rural areas to urban areas. This transition exists to some extent, but it is now more appropriate to talk about the “double burden of illness”, both infectious and chronic. Rapid urbanisation has led to an increase in the incidence of infectious diseases, as well as a rise in the number of chronic diseases. Poor people in urban areas who live in mouldy homes are more likely to suffer from asthma, and overworked factory workers are more prone to injury and pollution.

AMS comprises ten independent countries, with more than half a billion-people spread across different countries. National characteristics (Table 2.4), including social, cultural and economic differences, contribute to significantly other health conditions and systems inside and outside AMS. Rapid urbanisation and migration are all issues of emerging infectious diseases, but their outbreaks drive regional cooperation in sharing information and improving disease surveillance systems (Lancet, 2011).

Table 2.4. National Characteristics of AMS as Factors in Health Provision

DHS Survey	GNI per Capita, PPP, US\$ (2020)	GHE % of Total, US\$ (2018)	Land Area, km ² (2020)	Gini Index, % (2019)	Hospital Beds, per 1,000 population (2017)	Health Workers, per 1,000 population (2018)	Population, total (2020)	Attended Delivery, % (2019)
Brunei Darussalam	67,560	95.14	5,270	n/a	2.9	1.6	437,483	100
Cambodia	4,250	21.27	176,520	n/a	0.9	0.2	16,718,971	89
Indonesia	11,740	49.33	1,877,519	38.2	1.0	0.4	273,523,621	95
Lao PDR	7,800	38.70	230,800	38.8	1.5	0.4	7,275,556	64
Malaysia	27,350	51.18	328,550	41.1	1.9	1.5	32,365,998	100
Myanmar	4,980	14.83	652,790	30.7	1.0	0.7	54,409,794	60
The Philippines	9,030	32.65	298,170	42.3	1.0	0.6	109,581,085	84
Singapore	86,450	50.35	709	n/a	2.5	2.3	5,685,807	100
Thailand	17,710	76.27	510,890	34.9	2.1	0.8	69,799,978	99
Viet Nam	8,200	45.56	331,212	35.7	2.6	0.8	97,338,583	94
AMS Average	24,372	47.53	448,081	37.4	1.7	0.9	66,713,688	88.5

Note:

- 1) GNI = gross national income; PPP = purchasing power parity; GHE = government health expenditure (as % of total health expenditure); n/a = not available at the time of publication
- 2) Total population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship—the values shown are mid-year estimates
- 3) Values for the attended delivery were calculated using the survey design and Demographic and Health Surveys sampling weights

Source: World Bank, UN, ADB, WHO, OECD

2.3.3.1. Demographic and Health Survey

Studies show that social and economic factors, such as income, education, employment, community safety, and social support, can significantly affect health improvement and vice versa (Artiga & Hinton, 2018). Furthermore, related to the SDGs, health has become one of a country's development goals to improve socio-economic conditions. Thus, health is an important issue that must be addressed due to a severe problem in terms of health over the past 70 years in developing countries, especially in the ASEAN region (Muryani & Indra, 2013).

Table 2.5. Demographic Health Survey in AMS

Country	Survey (DHS)	LE	MMR	IMR			U5MR		
		Total	Total	Total	Urban	Rural	Total	Urban	Rural
Brunei Darussalam	2017	77	27	7			8		
Cambodia	2014	72	170	28	8	31	35	13	38
Indonesia	2017	71	190	24	24	23	32	31	33
Lao PDR	2017	66	187	54			66.7		
Malaysia	2017	75.1	21.1	6.4			7.7		
Myanmar	2016	66	200	40	28	44	50	34	55
The Philippines	2017	69	120	21	18	23	27	23	30
Singapore	2017	83	6	2			3		
Thailand	2017	75.5	20	11			7		
Viet Nam	2017	76	49	18			23		
AMS Average		73.06	99.01	21.14	19.5	30.25	25.94	25.25	39

Note:

1) LE = life expectancy; MMR = maternal mortality rate; IMR = infant mortality rate; U5MR = under-5 mortality rate

Source: WHO, ICF, The World Bank, Institute for Health Metrics and Evaluation, OECD

2.3.3.2. State of Health in AMS

In general, **Singapore** has better health status, considering several indicators, such as life expectancy, infant mortality rate, under-5 mortality, and maternal mortality. As Singapore is a highly-urbanised country and has a highly-formalised workforce, Singapore does not have the challenge to implement social and/or health protection in the employment aspect. Same to Singapore, **Brunei Darussalam** does not have any issues with access to healthcare, wherein Brunei has decentralised health services that have been going for around ten years. In terms of accessibility, Brunei has already been informed about the minimum payment for health services registrations. In addition, the Universal Health Coverage (UHC) has been achieved. Although Brunei has community services and mobile services to reach people from rural areas, maintaining health care services remains a challenge. For instance, only about 45% of children are immunised in rural areas. Overall, Brunei Darussalam has no significant issues related to urbanisation, especially in terms of the health care system. Brunei has collaborated between agencies or departments of line ministries and partnerships with NGOs to close the rural and urban areas.

Regarding health issues in **Cambodia**, there is an improvement in life expectancy from 2000 to 2019 in Cambodia, reaching 58 for men and 69 for women. Also, the under-5 mortality rate decreased from around 100 to 229 per 1000 live births. To conclude, compared to ten years ago in Cambodia, the health situation is much

better. In another instance, data from 2016 shows that the health equity fund has covered 2.6 out of the 16 million population in Universal Health Coverage (UHC). COVID-19 affected both urban and rural areas. However, fortunately, the budget for the health care system in rural areas has not been cut down since the budget from NGOs or the development partner is still going on. Even though the funding is not being cut down, the challenge appears in other forms, such as the high demand for food due to the loss of their jobs and the inability to buy food. In correlation with employment, especially with the informal sector, there remains a challenge in providing social and health protection in Cambodia.

Meanwhile, in **Indonesia**, the gap in health infrastructure, which the poor infrastructure can see in rural areas while in urban areas has better quality, remains a challenge for Indonesia. For instance, during COVID-19, there was a gap in vaccination rates between urban and rural areas. In addition, the gap also has long been apparent to the availability and quality of health workers and inequities in access to healthcare. Indonesia has been consistently underinvesting in its health sector, spending approximately 3% of GDP on health. Other studies also point out the persistent gender disparities in health. Another instance, in the infant and child mortality rate, despite it declining and an increase in life expectancy over the past five years' decades, stunting among children and anaemia among women remains a problem. The phenomenon indicates that Indonesia underinvests in improving nutrition and challenges related to food security. The sustainability of Universal Health Coverage remains unsolved, particularly with high costs of treatment and economic loss due to non-communicable diseases (NCDs), such as diabetes and cardiovascular illness (ANU Project: Indonesia Update, 2021).

Health gaps are also emphasised in rural areas and highland areas in **Lao PDR**, whereby in these areas, the poverty rate is higher than in urban areas resulting in worsening health conditions. Another health challenge and issue which Lao PDR is facing is the healthcare delivery and education due to cultural and linguistic barriers, considering approximately 52.5% of the total population comprises ethnic groups. Regarding health financing, there is a limited range of services at PHC facilities in rural areas and the poor quality of care due to limited population coverage by social protection schemes. To conclude, poverty in Lao PDR's rural areas remains a significant problem resulting in unplanned pregnancies. Women have difficulties accessing family planning and maternal health services, which increases the risks during childbirth and maternal mortality ratio (MMR). Low public spending, low wages, low morale and poorly motivated health personnel have resulted in a hostile environment that creates a barrier to accessing health facilities (WHO, 2014). There are correlations among poverty, geographic location and ethnicity in accessing health services.

Next, urban-rural exodus in **Malaysia** has contributed to the issues of inadequate facilities and mismatch of resources across different levels of healthcare services. The insufficient number of health personnel, particularly specialists, impede healthcare services to rural and remote areas. On the other hand, public hospitals and clinics in urban areas face overcrowding and long waiting times for treatment, affecting quality-of-service delivery. Rather than urban-rural exodus, Malaysia experiences the increase of non-communicable diseases (NCDs) due to the shift of demographic and ageing population. However, urbanisation has also amplified inequities in health determinants, with adverse health impacts, particularly for NCDs. For instance, indicators for maternal deaths have reduced from 141 per 100,000 live

births in the 1960s to 24.9 per 100,000 live births in 2020. Now, Malaysia is facing a challenge to further reduce the relatively low maternal mortality ratio. In terms of environmental-related diseases, urban areas offer potential health benefits, such as improved access to health care, employment, education and infrastructure, as well as potential health risks. There is a need in exploring the possible drivers of associated urban diseases as follows: air pollution, noise pollution, water quality and insufficient water availability, waste-disposal problems, drainage problems and high energy consumption, shortage of housing and sanitation, growth of slums and high energy consumption, and traffic congestion, poor public transport, and improper treatment of sewage.

In **the Philippines**, one of the significant issues in fostering inclusive development across the urban-rural continuum at the national level is integrated databases related to health insurance. In addition, urban health inequalities policy are becoming more severe, as rapid urbanisation is overwhelming the capacity of social services, housing, and infrastructure. The Philippines, to be said, will face an exacerbated triple burden of diseases in the future, such as infectious diseases, specifically TB, HIV/AIDS, vector-borne diseases and vaccine-preventable diseases, which will persist and continue to spread in urban settings. Alongside contagious disease, the Philippines also faces non-communicable disease (NCDs) challenges, such as stroke, diabetes, and chronic obstructive pulmonary diseases, which will continue to increase. Another essential concern is injuries, substance abuse and mental health problems. This exacerbated the triple burden of disease and required adequate resources to implement the appropriate interventions. Overall, urban rates mask inequalities between slums and non-slums. Across the first five years of life, the mortality gap between slums and non-slums is widening.

Moreover, while aggregate child mortality rates are lower in urban areas than in rural areas, rates in urban slums are like those in utilisation. The inequalities are apparent in health outcomes such as mortality rate and service utilisation, such as antenatal care (ANC) visits, facility-based delivery (GBD) rates, and immunisation. The inequalities also exist in social determinants of health like poverty, education, and health financing indicators such as PhilHealth coverage. The impact of COVID-19 in the informal sector gave rise to urban vulnerability, such as inadequate access to water.

While healthcare services in **Thailand** are provided and accessible for those who work in rural areas, migrant workers and informal workers as long as they are registered. Specifically, migrant workers, if they are not registered yet, have to go back to their country to register and come back to Thailand as legal workers to access healthcare services. In terms of healthcare services during the COVID-19 pandemic, although it is provided and accessible, however, some people in rural areas do not have an ID card. Thus, these people cannot access healthcare services. Therefore, some vulnerable people are affected by the limitation of healthcare services access, such as vaccines. However, there is no significant health issue impacted by the COVID-19 pandemic in rural and urban areas. Thailand is trying to provide better access to transportation to accommodate people from rural areas who want to achieve better healthcare quality. Thailand faces several challenges involving informal workers in terms of underage workers, such as underpayment and extra hours. However, every Thai citizen (if they are registered) can achieve the Universal Health Coverage (UHC).

Furthermore, **Myanmar** is facing the challenge where the provision of health care exists. However, the workers from rural areas do not know this information. There is also a gap between the basic infrastructure of health services between urban and rural areas, whereby health infrastructures are more accessible in urban areas than in rural areas. In contrast, accessibility to health services for informal workers is not a challenge for **Viet Nam**. The government had implemented health insurance, and recently, 92% of the nation's population had joined the system. The number indicates equal access to health services among the workers.

2.3.4. Gender Equality and Social Inclusion in AMS

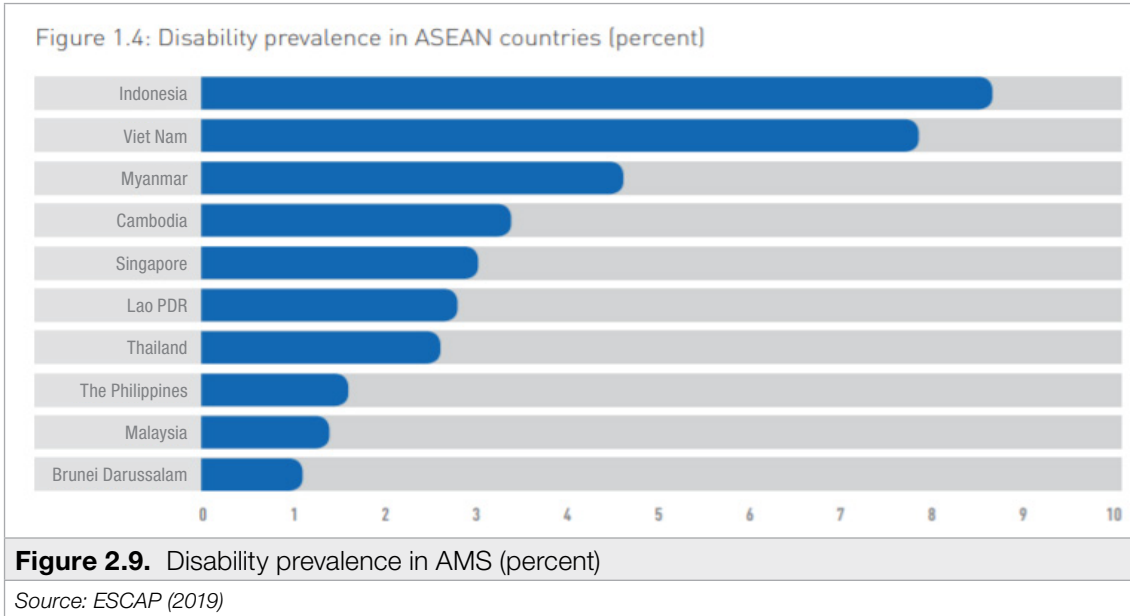
There are crucial roles that urbanisation continues to play in driving development in AMS, as well as the influence it has on gender equality and social inclusion. While urbanisation patterns indicate some progress for improving economic growth through economic activity in urban areas, they imply less success in other areas, such as developing the social component. Today, disadvantaged people in urban areas confront a variety of issues. Their engagement in city life and creating safe, sustainable cities and public spaces are often ignored or under-resourced for those in rural areas. Individuals who must relocate to cities in quest of a better living are more susceptible because their level of education and talents are insufficient (FGD with AMS).

The financial, education, health care, and social service gaps between rural and urban areas have expanded over time (Huynh, 2018). Rural locations are more likely to have lower skill levels and a lack of infrastructure (GIZ, 2019a). While economic informality exists in urban and rural regions, rural residents are likely to have fewer alternatives. Estimates of national poverty can analyse poverty and inequality within AMS. Despite progression in eliminating rural poverty, as indicated in Table 2.6, there is still a long way to go. In recent years, Cambodia, the Philippines, and Thailand have effectively eliminated rural poverty. However, the majority of AMS continue to have considerable levels of rural poverty. Although there are still pockets of urban poor, general poverty rates have declined.

Table 2.6. Proportion of Population Below Rural and Urban Poverty Lines

Country	Earlier Year			Latest Available Year		
	Year	Rural	Urban	Year	Rural	Urban
Brunei Darussalam	N/A					
Cambodia	2003	54.2	28.5	2012	20.8	4.4
Indonesia	2002	21.1	14.5	2016	14	7.7
Lao PDR	2002	37.6	19.7	2012	28.6	10
Malaysia	2002	13.5	2.3	2014	1.6	0.3
Myanmar	2004/5	35.8	21.5	2015	23.3	9
Philippines	2000	47	19.9	2018	12.6	5
Singapore	N/A					
Thailand	2002	40.2	17	2013	13.9	7.7
Viet Nam	2002	35.6	6.6	2014	18.6	3.8

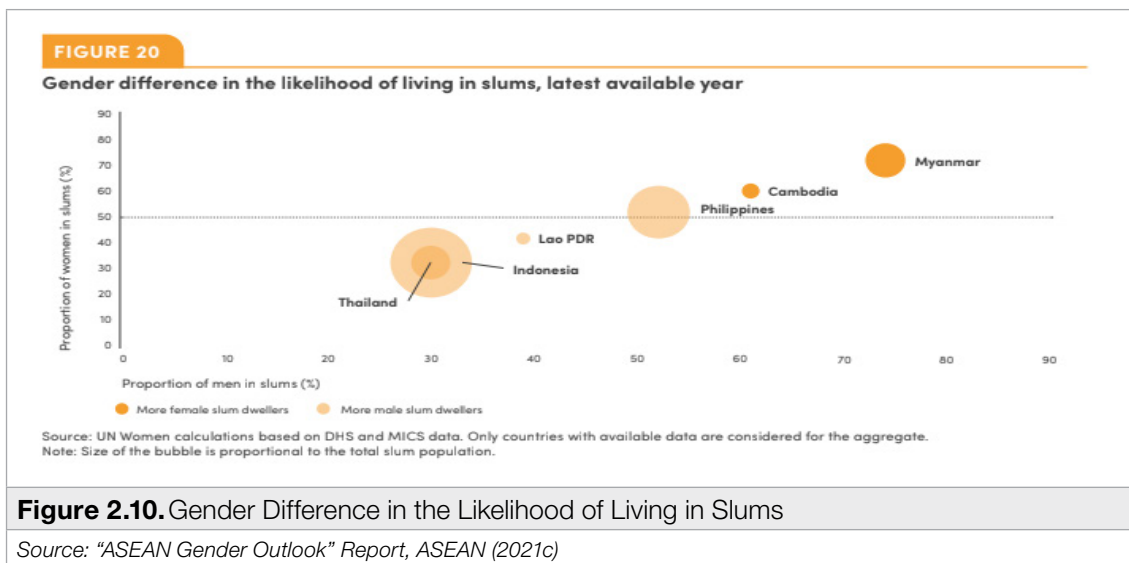
Source: UNSTAT (2020) and UN-ESCAP (2020). Additional statistics from OECD (2019) for Indonesia (latest year); World Bank (2020) for Myanmar (both years); ADB (2009, p. 122) and Philippines Statistical Authority (2020) for the Philippines; and Thang et al (2006) for Viet Nam (earlier year).



Women rely on natural resources to support their livelihoods, particularly in countries where the majority of employed women are engaged in rural and agricultural work, such as Lao PDR (64%), Viet Nam (39%), and Cambodia (34%) (ibid.). Women in rural areas face gendered norms that prevent them from making autonomous decisions about paid work while managing care work and agricultural production (UNICEF, 2019). Rural women, in particular, face increased risks of income loss as a result of external shocks, namely the COVID-19 pandemic (FAO, 2020). A variety of social and familial constraints also limit their mobility. Formal laws and informal social customs frequently limit female choices (North, 1990). These factors result in implicit or explicit gender bias regarding inheritance rights, ‘socially acceptable’ jobs, and a lack of family support (Tanwir & Sidebottom, 2019; Teoh & Chong, 2014).

Rapid urbanisation in the region presents both possibilities and problems, notably for women living in slums. Female slum dwellers are especially susceptible because they typically confront challenges such as fetching water and cooking with dangerous fuels. For example, in the Philippines, 21% of female slum dwellers would walk for more than 30 minutes to obtain water, compared to 3.7 percent of female non-slum dwellers. The comparison demonstrates that intersectional concerns, such as socio-economic position, create gender inequalities. Similarly, 36% of women in slums cook with unclean fuels, compared to 15% of their non-slum counterparts in cities. As a result, providing essential

services such as water supply, sanitation, and safe-clean fuels to slum dwellers can transform hardship into economic, social, and environmental opportunities (ibid.).



1. Brunei Darussalam

Overall, during the urbanisation process, Brunei Darussalam has various obligations to safeguard vulnerable populations, such as women and children. In terms of transportation safety, the Ministry of Communications developed a Land Transport White Paper in partnership with Brunei Darussalam's Ministry of Development to aid in the achievement of Wawasan 2035's overall aims. Under Theme 4: Promoting Social Sustainability, Brunei Darussalam deploys resources to monitor and perceive actual passenger and staff safety and security issues on all transport networks, mainly focusing on women, children, and other vulnerable groups (Policy SH2). The policy also takes complete account of the needs of the disabled and mobility impaired during the planning and design of transport infrastructure and services (Policy SH4).

The country has an approach to increasing public awareness through electronic posters, social media, television, and radio to protect women from sexual harassment and violence (FGD with Brunei Darussalam, 2021). The effort to protect women and girls is also reflected in the Laws of Brunei (Revised Edition 1984), Chapter 120 on Women and Girls Protections. In March 2021, in conjunction with International Women's Day, the Ministry of Culture, Youth, and Sports launched PREPanita Forum to empower female students from higher institutions to be ready for the world of work. During the COVID-19 pandemic, the country also provides training and programmes for women.

Under Brunei Darussalam's 2030 Development Agenda, the government attempt to promote the participation and leadership of PWDs, as endorsed by the current king in reign. This initiation will be implemented through the Plan of Action under the Special Committee on the Elderly and Persons with Different Abilities, the National Council on Social Issues, which highlighted strategies on the development, well-being, welfare, and support system for people with different abilities. So far, the government has assisted PWDs in entering the labour field by giving pension allowances, implementing programmes to strengthen their skills to obtain jobs and start their businesses, and promoting and selling PWD-made products. On infrastructure development, some criteria are places that guarantee buildings to have amenities, access for the differently-abled, and various initiatives to help PWD in assimilating into society.

The Ministry of Culture, Youth, and Sports also ensure that children's rights are protected. They attempt to decrease educational obstacles by offering free universal primary education and free secondary education to citizens and permanent residents, increasing their literacy rate to 100 percent. However, the country continues to struggle due to a lack of professional skills in formulating and executing child protection measures.

2. Cambodia

In Cambodia, gender norms and stereotypes are deeply rooted in society, leading to inequality between men and women and depriving women of their fundamental rights. In urbanisation, girls need to understand and exercise their rights to reduce poverty and promote development. Even today, fewer girls are graduating from school in Cambodia than boys. The level of education often correlates with the power of women to exercise their reproductive rights (number and spacing of children, the right to decide when to marry and when to have children).

Concerning violence against women, Cambodian women continue to face physical, sexual, emotional, and economic violence that affects all income, culture, and class levels. According to the Cambodia Demographic and Health Survey 2014, 59.1% of ever-married women who have experienced physical violence reported their husbands/partners as the perpetrators. Similarly, 64% of sexual violence perpetrators are noted to be current husbands/partners (ibid.). In response to the numbers, in 2020, Cambodia's Ministry of Women's Affairs released a National Action Plan to Prevent Violence against Women 2019-2023. Several critical successes are also identified in the Mid-Term Review of the National Action Plan for Prevention Violence against Women (NAPVAW) 2014-2018, among others:

1. Approval of Media Code of Conduct for Reporting on Violence against Women.
2. Completion of Minimum Standards of Basic Counseling for Women and Girl Survivors of Gender-Based Violence.
3. Increase budget to meet the urgent needs of victims/ survivors of violence against women.

Cambodia also protects the rights of people with disabilities (PWDs). The Protection and the Promotion of the Rights of People with Disabilities (2009) is a law to protect the rights of PWDs to be employed without discrimination in the public and private sectors. Employers who use more than a certain number of full-time employees must hire a proportionate number of full-time employees with disabilities. They also need to provide reasonable accommodation in the workplace. Cambodian law also has an element of affirmative action. For example, a company needs to hire one disabled person for every 100 workers, and a government employer needs to hire one disabled person for every 50 workers.

Cambodia's government has collaborated with agencies and other institutions to promote child rights, child protection, and children's well-being through programmes such as the National Child Participation Guideline, the First National Action Plan for Child Development 2016-2018, the National Child Protection Commission, Juvenile Justice Law, sub-degree on Child Protection in All Settings, and others endorsed by the Cambodia National Council for Children (CNCC). Since Cambodia ratified the UN Convention on the Rights of the Child (CRC) in 1992, more than 97 percent of girls and boys have been enrolled in primary school, and infant mortality rates have dropped by more than 70 percent. However, not every child has reaped the full benefit, as malnutrition remains high, and children are not meeting the learning standards required for their age

group. Not only that, in Cambodia, one out of every four children is estimated to have suffered some form of violence.

3. Indonesia

In terms of gender equality, Presidential Instruction No. 9/2000 on Gender Mainstreaming in Development is adapted by several Indonesian ministries to achieve gender justice and equality through policies, programmes and activities that take into account the experiences, aspirations, needs and problems of men and women in the process of monitoring and evaluating all aspects of life and development. The Ministry of Women's Empowerment and Child Protection (MoWECP) is responsible for monitoring and analysing gender issues in various programmes and activities in the provinces. In addition, MoWECP initiated a Women-Friendly and Caring for Children Village (Desa Ramah Perempuan dan Peduli Anak/DRPPA) to produce quality and competitive Indonesian human resources and achieve Sustainable Development Goals (SDGs) in villages.

In 2020, together with UNFPA Indonesia and UN Women, MoWECP launched the Guidelines for the Protection of Women's Rights from Gender-Based Discrimination and Violence (Kekerasan Berbasis Gender/KBG) in Pandemic Situations. The guidelines are responses to an increase in the country's violence cases against women. The Indonesian Women's Association for Justice Legal Aid Institute (LBH APIK) saw a three-fold increase in referral cases from the country's National Commission on Violence against Women over two weeks since the work-from-home order was put in place (during the COVID-19 pandemic). MoWECP also has Ministry Regulation No. 1 of 2020 on the Provision of Houses for Protecting Women Workers in the Workplace to realise the fulfilment of the rights and protection of women workers in the workplace.

No one should be left behind in the development and growth of the urban population, including the disabled. This principle ensures that the Ministry of Labour establishes a disability department and provides services to PWDs by providing work advice and information to have the same access as other workers do. In Indonesia, the employment of PWDs is legally guaranteed by Law number 8 of 2016 on PWD, which is substantially about the fulfilment of PWD's rights and contains principles of anti-discrimination against PWD. This law mandates the government to apply the necessary steps to ensure that the rights and regulations are used in various sectors, including education and employment.

Under Indonesia's Law number 35 of 2014 on amendment of Law No.23/2002 on Child Protection, so far comprehensive legislation on child protection, the government implements efforts to eliminate child labour and safeguard children and young people. Amid the COVID-19 pandemic, the government, with the assistance of The Indonesian Child Protection Commission (KPAI) and other agencies, urges a push of effort in ensuring children's rights to play, education, and access to health services are adequately distributed due to the COVID-19 relatively high rate of illness and deaths amongst children in Indonesia, as well as to deliver long-distance learning of the highest possible quality.

4. Lao PDR

In terms of gender parity in education, Lao PDR has made various efforts to bring the two on an equal footing. Still, due to deeply established gender inequalities, the difference in educational achievement between genders is noticeable. Gender inequalities have led to additional issues such as violence, heavy double duty in the home and at work, the

possibility of child marriage, and early pregnancy. In Lao PDR, most individuals rely on customary law and village-based justice due to the formal judicial system's limited reach due to language hurdles and a lack of legal professionals.

Many PWDs in Lao PDR, as in other developing nations, live in poverty and have limited access to education, health care, decent housing, and work. To address this during the year, Lao PDR, through the Ministry of Labour and Social Welfare, collaborates with other departments, ministries, and agencies to ensure that the rights of PWDs in Lao PDR are protected. Lao PDR primarily addressed this issue through Community-Based Rehabilitation (CBR), a community development strategy for the rehabilitation, opportunities equalisation, and social inclusion of all PWDs, including their families.

The country is seeing an increase in the number of children who are disabled, mainly as a result of accidents, pregnancy and delivery outcomes, childhood sickness, and unexploded ordnance (UXOs). As a result, the children are more vulnerable to mistreatment, aggression, or abuse from their classmates. Due to a lack of health and welfare advantages, they cannot engage fully in society and obtain early schooling. Lao PDR struggles to apply established community-level practices to remove these challenges despite their efforts. In collaboration with the Committee of the Protection and Assistance of Children (CPAC) members with support from UNICEF, Child Frontiers for the Ministry of Labour and Social Welfare conducted the Assessment of the Child Protection System in Lao PDR.

5. Malaysia

The Malaysian government is working on a draft that focuses on women's empowerment and non-discrimination to achieve gender equality as an investment in the country's future, particularly for women and girls. The legislation's creation also aims to address issues concerning women, such as women's participation as decision-makers and women's empowerment in the economy and labour force. A Special Project Team has been formed to ensure that laws relating to gender equality and anti-discrimination are drafted with all parties in mind. Through concerted efforts of various ministries and agencies, the government is also making amendments to the law to address the challenges and issues faced by women in Malaysia. Most recently, the Ministry of Human Resources is refining the amendments to the Employment Act 1955 to address problems faced by women at work.

Many national and social welfare directives protect the rights of PWDs in Malaysia. The 2003 National Social Policy emphasises that PWDs enjoy equal rights and full participation in Malaysian society. The goal of the 2007 National Disability Policy is to achieve social integrity and stability, national power and well-being for a progressive and established Malaysian society. Service Circular No. 3 in 2008 was launched to implement the 1% policy on employment opportunities for PWDs in the public sector. Malaysia also has an Incentive Allowance for Disabled Workers initiative. An incentive is given through the programme to encourage PWDs to be hired and become members of an independent and productive society and improve the standard of living of PWDs in their communities.

Malaysia has made significant progress in eradicating child poverty, preventing diseases, protecting children from harm, and bringing more children to school. However, several children are left behind due to their vulnerable state and inability to be reached. To address these issues, the Malaysian government implemented the National Policy on

Children and the National Child Protection Policy, and the Action Plans formulated by the Ministry of Women, Family, and Community Development.

6. Myanmar

Myanmar's Ministry of Social Welfare, Relief and Resettlement, Department of Social Welfare has several focal points to implement social welfare services in different areas: children, youth, women, elderly, PWDs, and social protection. The focal points are the National Committee on the Rights of the Child (NCRC), the Myanmar National Committee for Women's Affairs (MNCWA), ASEAN Child Affairs, ASEAN Youth Affairs, ASEAN Women Affairs, and ASEAN Social Welfare and Development.

MNCWA's National Strategic Plan for the Advancement of Women (NSPAW) 2013-2022 outlines a comprehensive approach by the Myanmar government to improve the situation for women and girls in the country. The plan has identified 12 priority areas for achieving gender equality. It consists of full agreement with two international treaties to combat and empower violence against women and girls. They are the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and are the basis of the Beijing Platform for Action (BPfA).

Myanmar's National Committee for the Rights of Persons with Disabilities was founded in 2018 to improve people's lives with disabilities in Myanmar. For the proper livelihood of PWDs, the government has collaborated with other sectors to improve training courses to assist them in entering the labour field and provide acceptable circumstances to enable effective participation in political and public life.

7. Philippines

The Philippines' inclusive development plan is currently under the progress of development. Due to the lack of data and insufficient data measurement, the Philippines still struggles to develop such a plan. However, the government has made a couple of programmes and policies. Overall, gender-based discrimination policies will be implemented under one roof, the Philippines' Gender Equality and Women Empowerment Plan, administered by the Philippine Commission on Women (PCW) in collaboration with other organisations. This initiative aims to eliminate gender imbalance in all domains. The government intends to ensure that women's rights and health are protected in the workplace by extending the maternity leave law until 105 days.

They also recently passed a sanitary breastfeeding station, which was first developed in 2011 by the Department of Health under the Republic Act No. 10028. It is part of an act to expand the promotion of breastfeeding, amending for the Purpose Republic Act No. 7600, otherwise known as "an act providing incentives to all government and private health institutions with rooming-in and breastfeeding practices and for other purposes". This regulation must be applied to all establishments, whether a profitable or non-profitable establishment that employs nursing employees in any workplace unless exempted by the Secretary of Labour and Employment. Then, those workplaces must develop a clear set of guidelines that protect, promote, and support breastfeeding programmes.

The Philippines has the Magna Carta for Disabled Persons. Under the Republic Act No. 7277, this act provides for the rehabilitation, self-development and self-reliance of PWDs and their integration into the mainstream of society and other purposes. Here they also encourage private sectors in promoting the welfare of PWDs and encourage partnership to address their needs. Section number 4 stated that the people are given auxiliary aids and services, including interpreters or other effective methods to deliver

hearing-impaired materials. Those with visual impairments are given qualified readers, taped texts, and other procedures. The Philippines has also collaborated with other countries to aid infrastructural purposes to enhance this act's effectiveness.

The Philippine government assures children's right to sufficient access to necessities, housing, proper medical treatment, and other physical requirements of a healthy and robust existence by Presidential Decree No. 603 on the Child and Youth Welfare Code. The Government of the Philippines also enforced its decree through other instruments such as the Child and Youth Welfare Code, the Special Protection of Children Against Child Abuse, Exploitation, and Discrimination Act, and other provisions that guarantee children's rights under Philippine regulations and law.

8. Thailand

Thailand has enforced its law to battle gender discrimination in the workplace through the Employment & Labour Law, established in the Gender Equality Act (2015). In this law, unfair discrimination is defined as any act or omission of an action that causes division, discrimination, or limitation of any right or benefit, either direct or indirect, without justification and just because the person is a male or a female or has different appearances from his/her colleagues.

In the Labour Protection Act (1998), equal treatment for males and females is endorsed (Section 15); equal pay among all sex for work of the same characteristics (Section 53); prohibition of sexual abuse, harassment or nuisance against all sex in a workplace setting (Section 16); special protection for pregnant workers (Section 39, 39/1, 41); and prohibition of child labour and special protections for young workers (Section 44-52).

Thailand's government supported the rights of PWDs through government documents such as the Thai constitution, the Persons with Disabilities' Quality of Life Promotion Act (2007), the National Plan on Quality of Life Development of Persons with Disabilities, the Persons with Disabilities Education Act, 2551 (2008), and the Declaration on Rights for People with Disabilities. Thailand has formulated its national plans for 2022 in accordance with the rights of PWDs, collaborating with ministries such as the Ministry of Public Health, the Ministry of Education, the Ministry of Labour, and with assistance from other agencies and institutions. It begins with assisting them to enter the labour force by promoting the hiring of PWDs. The plan also helps them daily by implementing government infrastructure plans in transportation and public spaces that advance the mobility of PWDs.

Children in Thailand confront issues, such as being deprived of a stable home environment, being economically and sexually exploited, being disabled, and being discriminated against because of their ethnicity. In Thailand, children's rights are protected under the ministry via the aid of government institutions and other agencies, with existing laws such as the Child Protection Act, Child Support Law, and other instruments. In Thailand, particularly amid the COVID-19 pandemic, the government has set up a post in each province to assist people from low-income families in receiving support to stabilise their ability to provide for their children, such as through monthly allowances and other necessary assistance.

9. Singapore

Singapore has made significant efforts to tackle discrimination in the workplace. Employees who were dismissed on discriminatory grounds, including gender- and disability-based discrimination can seek compensation or reinstatement, as set out in the

Employment Act and Retirement and Re-employment Act. The Singapore government also pushes for a multi-pronged approach in protecting their employees from workplace harassment through The Protection from Harassment Act (POHA) that was launched in 2014, followed by the Tripartite Advisory with hopes to manage workplace harassment that was introduced in 2015, and the Tripartite Standard on Grievance Handling in 2017. In 2019, the Tripartite Alliance for Fair & Progressive Employment Practices (TAFEP) launched the TAFEP Workplace Harassment Recourse and Resource Centre.

The Ministry of Social and Family Development works closely with the two community-based Family Violence Specialist Centres (FVSCs) and an Integrated Services for Individual and Family Protection Specialist Centre (ISIFPC) to equip them to provide support to all persons who experience any form of violence. This includes safety planning, counselling, and facilitating alternative safe accommodations for survivors where necessary. Two of the three protection specialist centres are able to provide comprehensive support, including safety planning services and psycho-social support, to all persons who experience family and sexual violence, and MSF is working with the third protection specialist centre to equip them with the capability and capacity to support persons who experience extra-familial sexual violence, in addition to persons who experience family violence. During the COVID-19 period, there was an increase in family violence-related enquiries and reports. In particular, the number of new cases taken up by FVSCs and the ISIFPC increased by 14% during the Apr 2020 to Mar 2021 period compared with the preceding 12 months. To ensure that survivors continued to have access to services, community-run social service agencies such as FVSCs and crisis shelters continued to provide their services throughout the COVID-19 period. The Government also convened the multi-stakeholder Taskforce on Family Violence, which delivered its recommendations in Sep 2021, to tackle family violence. The Government accepted in principle, all the recommendations in Oct 2021, with a view to progressively implement the recommendations.

Singapore's efforts to enable PWDs to be integral and contributing members of society are guided by its Enabling Masterplans (EMP), which are developed through the collective effort of government agencies, private sector and people sector, including persons with disabilities, disability organisations and Social Service Agencies (SSAs). Under the most recent EMP (2017-2021), the government has introduced new early intervention programmes, increased support for students with Special Educational Needs (SEN) in mainstream schools and Institutes of Higher Learning, enhanced measures to support the employment of PWDs, improved access to healthcare, assistive technology and the built environment, and strengthened caregiver support, digital inclusion and inclusion in leisure and recreation. A Steering Committee consisting of members from the public, private and people sectors, including persons with disabilities and caregivers, is currently developing the next EMP.

Singapore is committed to protecting and promoting the wellbeing of our children. In Singapore, the legal safeguards for the protection of children and young people are provided primarily through the Children and Young Persons Act. Singapore's government believes that education is a key social enabler. Education in Singapore is heavily subsidised at all levels for Singaporeans, and the government provides a range of financial assistance to children from low-income families and ensures that no Singaporean child is denied an education because of a lack of means. The government also invests heavily in the early childhood sector to give every child a good start. Aside from raising the accessibility, affordability and quality of preschools, the government also runs a programme called KidSTART which support parents from low-income

families (with young children up to 6 years old) with knowledge and skills to nurture their children's development.

10. Viet Nam

In terms of urban development policies or programmes, Viet Nam has several social development policies and programmes appropriate for urban-rural settings. In the workplace, sexual harassment and discrimination based on skin colour, ethnicity, nationality, ethnic group, gender, marital status, pregnancy, political opinions, disability, HIV status, or membership in a trade association are prohibited by the Labour Code 2021. The revised labour legislation further strengthens worker rights for younger workers. To aid implementation, the Viet Nameese government published Decree number 145/2020/ND-CP (Decree 145) on directing the labour law implementation, which went into force on February 1, 2021. The order is more detailed about workplace sexual harassment policies. The policies cover any type of sexual harassment, whether physical, verbal, or nonverbal, such as body language or the direct or electronic presentation of sexual behaviour. The workplace has also been defined to encompass any area where the employee works, such as social events, workshops, business excursions, phone talks, automobiles, etc.

In Viet Nam, it has been demonstrated that families with disabled members tend to be on the lower side of the national average line. Children with disabilities also have less access to a school than their counterparts without disabilities. When Viet Nam performed its first large-scale national census on PWDs in 2016, the government remained committed to eradicating these issues. Viet Nam has several agendas on this issue, including National Action Plan on Disabilities (NAP), a National Action Plan on Vocational Training, and accessibility norms and standards in many important public institutions and transportation. They also have information and communication technology (ICT) to promote access to these norms and standards, such as sidewalks, a railway, a bus, and a third wheel motorbike.

In accordance with the United Nations Convention on the Rights of the Child, the Viet Nameese state has promulgated many policies and laws directly to ensure the rights of children, such as the constitution, the Law on Marriage and Family, and the Law on Protection of the People's Health, the Labour Code, the Education Law, and the ordinance on handling administrative violations. Millions of children in challenging situations have been safeguarded, and their living standards have improved due to these programmes. Every year, children with disabilities get startling amounts of social assistance, orphans receive allowances, a rehabilitation facility is given for children, and all children from low-income families, without exception, receive school tuition exemption or reduction.

2.4. Vulnerabilities across the urban-rural continuum

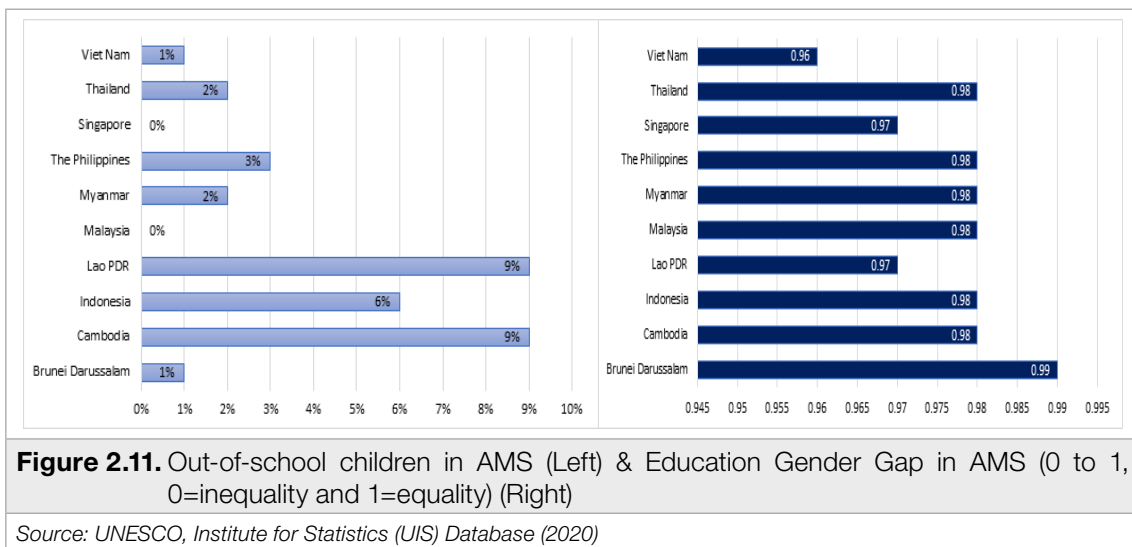
2.4.1. Education and Employment

2.4.1.1. Addressing Barriers to Inclusion in Education

Access to education in urban areas is better compared to rural areas. Better quality education in urban areas is a prominent reason for migration among younger people (UNESCO, 2019). Data analysis conducted by Ahlin (2017) showed high-performing

secondary school students are more likely to attend top universities, predominantly located in urban areas. Rural to urban migration can increase educational attainment in countries where access to education in rural areas is very low. From an education perspective, migration affects relatively few primary school-age children and slightly more secondary school-age youth. It primarily affects those migrating for post-secondary education (UNESCO, 2019).

According to a study conducted by Briones (2019), in the ASEAN region, a preponderance of a nation's children up to age 14 tend to be raised in rural areas; but, from age 15 and above, youth tend to migrate to urban areas, and one of mainly reason is to pursue education. Major issues in education are inequality and inclusion. Unfortunately, data regarding this group are inadequate. However, the available data on gender, out of school children and youth proportion not in education, employment, or training portray the existing condition in ASEAN Region.



Early childhood care and education (ECCE) is one of the best investments AMS could make to promote human resource development, gender equality and social cohesion. In LMIC countries, an average of primary aged children out-of-school are 10%, which means all AMS fall below that level. Even though, Cambodia and Lao PDR score adjacent to LMIC average and have the highest percentage share (9%) of out-of-school children among AMS. Location can be another factor for children being out-of-school. According to UNICEF EAPRO (2019), In Cambodia and Lao PDR, disparities in school attendance can be based on area of residence, creating large rural-urban gaps.

In order to address barriers to achieve inclusive education, generally, income and location-based inequalities are greater than gender disparities. Children living in more rural areas are particularly disadvantaged in secondary education in Cambodia, Lao PDR, and Myanmar. Despite gender disparities in education, social inclusion also happened in AMS facing discrimination due to indigenous people. For example, in Lao PDR, ethnic minorities (non-Lao-Tai) are particularly disadvantaged among rural populations, due to factors such as social exclusion, village resettlement, gender disparities, and lack of access to education. In Cambodia, ethnic minorities have long been impeded from education. The long-distance travel to school was a deterrence, and those who did attend often faced discrimination or lagged due to a lack of understanding, as classes were only taught in Khmer. Education is just one of

the ways that Cambodia's 24 ethnic minority groups face vulnerabilities. To resolve education exclusiveness aforementioned, inclusive efforts should be led by the government. Education in urban and rural areas also showed the different situations which disadvantages mainly seen in remote areas. According to Price (2020), in AMS, physical access to schools in remote areas is a key barrier to girls in rural areas and those with disabilities (e.g. long distances to travel, poor infrastructure, lack of safe sanitation and water spaces, or a lack of full grades being offered are common issues).

According to ILO's International Programme for the Elimination of Child Labour (2021), education is the key; through education and training, economically and socially vulnerable children and young people can lift themselves out of poverty and find ways to take a role in participating in their societies. In Indonesia, about 59% of child domestic workers in Jakarta and other metropolitan areas were girls from rural areas. More than half had primary education only. Many rural children work as domestic helpers in urban households. Despite out of school children, the range of inclusiveness also could be seen through NEET Rate participation (Figure 2.12). For youth, an average of 27% is not in some form of school, training, or employment. While six of the seven countries fall below this rate, it is an issue in Lao PDR, where 42% of youth are not in school or work.

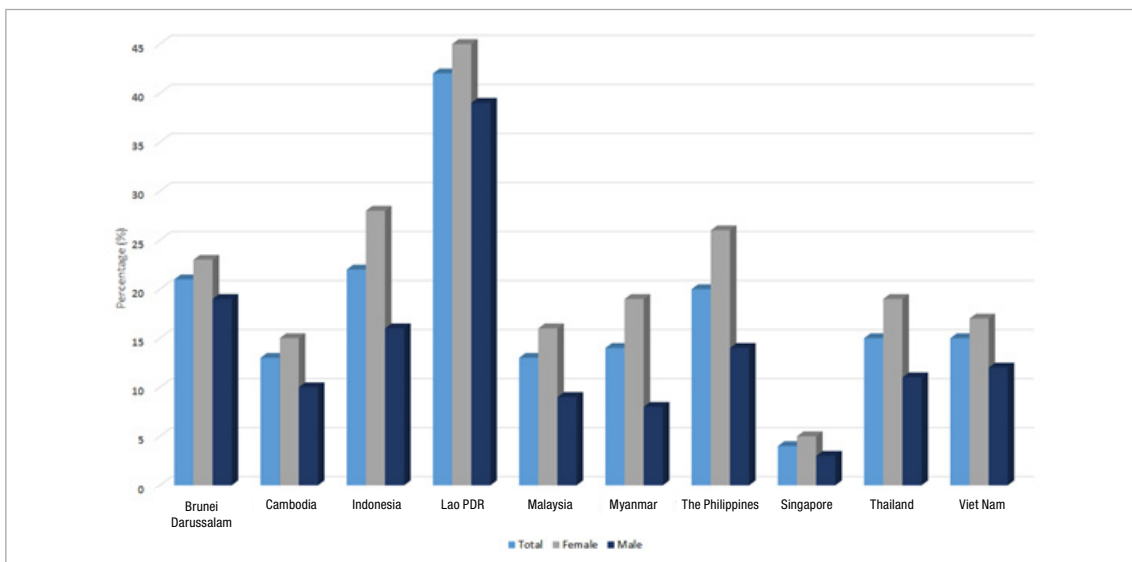


Figure 2.12. Proportion of Youth Not in Education, Employment, or Training (NEET) Rate (%)

Source: UNESCO, Institute for Statistics (UIS) Database (2020)

In the ASEAN regions, there are no explicit data to distinct NEET rates in urban and rural areas, so it's hard to interpret the pattern that was formed. However, there are cases in Indonesia that the value of NEET youth proportion in the regency area (rural) is relatively higher compared to the municipality area (urban). There are more areas with rural classification (Anggraini, 2020). Youth who live in rural areas tend to be easier to become NEET status than youth who live in urban areas. So, it is not surprising that the proportion of NEET youth is higher in the regency area compared to the municipality area in West Sumatera province (UCW, 2013).

2.4.1.2. Labour Structures in AMS

Labour structure in urban and rural areas can be observed in the composition of employment by sectors and regions which showed an overall recent distribution. In AMS, people who live in rural areas mostly working in agricultural sector, meanwhile people in urban areas tend to work in industry and services. One of the examples is labour structure based on sector and region in Cambodia (Figure 2.13). Based on a study conducted by UNESCAP in 2016, Cambodia is a highly rural and agricultural society, with approximately 79% of the population residing in rural areas. As agriculture is concentrated in rural areas, it absorbed more than 60% of rural employment. There is also substantial agricultural employment in urban areas outside of Phnom Penh. In total, agricultural sectors absorbed half of Cambodia's total labour force as the primary sector. Furthermore, those who have received an education could invest and innovate in the rural economy to build higher productivity and reduce labour factors.

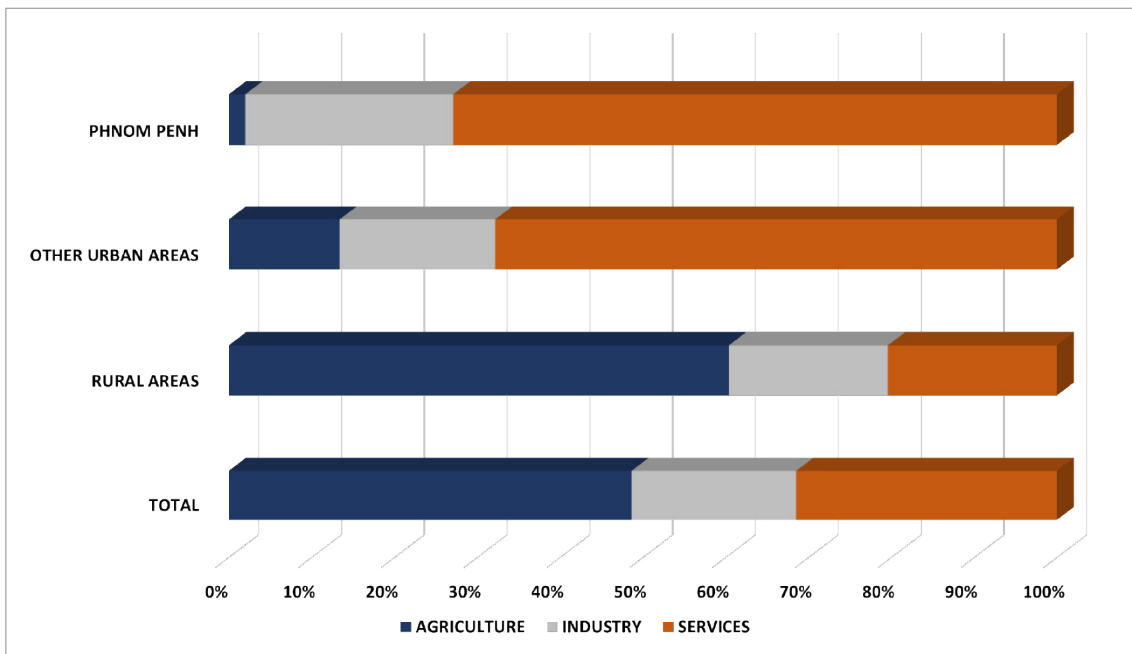


Figure 2.13. Employment by Sectors and Regions, 2013 (%)

Source: ADB, & ILO (2015)

Another example is Lao PDR. Labour structure in Lao PDR can be observed in the composition of jobs by region in Table 2.7 below. Regarding Lao PDR employment structure, the distribution in urban and rural areas, whether employed, unemployed or not in the formal labour force, showed diverse variation. For the unemployment rate, rural areas in the capital and south part of Lao PDR are higher, contradicting the Central and North part of Lao PDR in which rural scores are lower than urban areas. Moreover, the concentration of labour participation is mainly located in capital areas. The labour force participation rates were higher in urban areas, for men and those who are better educated than in rural areas, for women and those with less education, respectively. Of the remaining working-age population outside the labour force, the reasons for staying out of the labour force were mainly family-related or education (Lao Statistics Bureau, 2018).

Table 2.7. Labour Force Participation by Region and Locality in Lao PDR

Areas	Employed	Unemployed	Not in Formal Labour Force	Total	Unemployment Rate	Participation Rate
Capital	374,743	35,042	182,109	591,894	8.6	69.2
Rural	101,417	12,407	63,856	177,680	10.9	64.1
Urban	273,326	22,635	118,253	414,214	7.6	71.5
Central	832,667	40,916	528,865	1,402,448	4.7	62.3
Rural	625,672	22,376	401,800	1,049,848	3.5	61.7
Urban	206,995	18,540	127,065	352,600	8.2	64.0
North	775,180	14,866	579,254	1,369,300	1.9	57.7
Rural	513,760	5,890	426,420	946,070	1.1	54.9
Urban	261,420	8,976	152,834	423,230	3.3	63.9
South	381,210	25,984	433,474	840,668	6.4	48.4
Rural	260,020	20,444	330,854	611,318	7.3	45.9
Urban	121,190	5,540	102,620	229,350	4.4	55.3

Source: 2018 Household and Youth Survey, ADB (2019)

Lao PDR's major employment issues across the urban-rural continuum are that Lao people or society could not cope with technology due to their absorptive capacity. In the context of job seekers and employers, the distinction between cities and rural areas can significantly be seen because the potential capability of the community is not maximized. Due to the high skill requirements of the employer or industry, most job seekers do not have those skills. Thus, based on the result from the focus group discussion, The Lao Government also states that Lao PDR has not established criteria regarding employment skill standards written on employment law. In addition, the public sector is also involved in promoting employment.

Most people switch their jobs in the area of labour during COVID-19 pandemic. Based on the FGD result, Some AMS Government stated that the impact of the COVID-19 pandemic changed the pattern of urban-rural movement, and people tend to return to their origin because they are unemployed. In Malaysia, the type of work during the pandemic is more likely into informal employment, such as online business in the food sector. Meanwhile in Cambodia, job opportunities are more extensive in rural areas. In other hands, The Philippines government anticipated this by, establish a programme called The National Migration Strategy 2021–2023, which aims to enhance and consider the labour market, improve the productivity of workers, and at the same time secure employment. In Thailand, people who work in the service sector moving back to their origin are primarily located in rural areas and tried to develop start-ups, so the government support it by diminishing the gap through providing internet connections. In Viet Nam, it is estimated that around 1.3 million workers (excluding their dependents like children, parents) have returned to rural areas. The COVID-19 pandemic has impacted the demand for labour, leading to underemployment, especially in urban areas. As a result, it created a wave of labour mobility from urban industrial parks to rural areas, around 686,000 workers from urban areas had returned to their homeland.

Informal sectors are often sought by migrants to work in, making them vulnerable to low-paid jobs with little security (UNESCO et al., 2018). Education level becomes one of the factors of formal and informal employment requirements in urban areas and the challenge for migrants to get employed. Not to be confused with employment

in the informal sector, which is enterprise-based and defined in terms of the characteristics of the place of work of the worker, informal employment is defined in terms of the employment relationship and the protections associated with the job of the worker (OECD and ILO, 2019). Oftentimes, workers in informal employment are not guaranteed decent work, and they may not have access to their rights at work, social protection, job opportunities, but their contribution is crucial for economic growth, particularly in ASEAN.

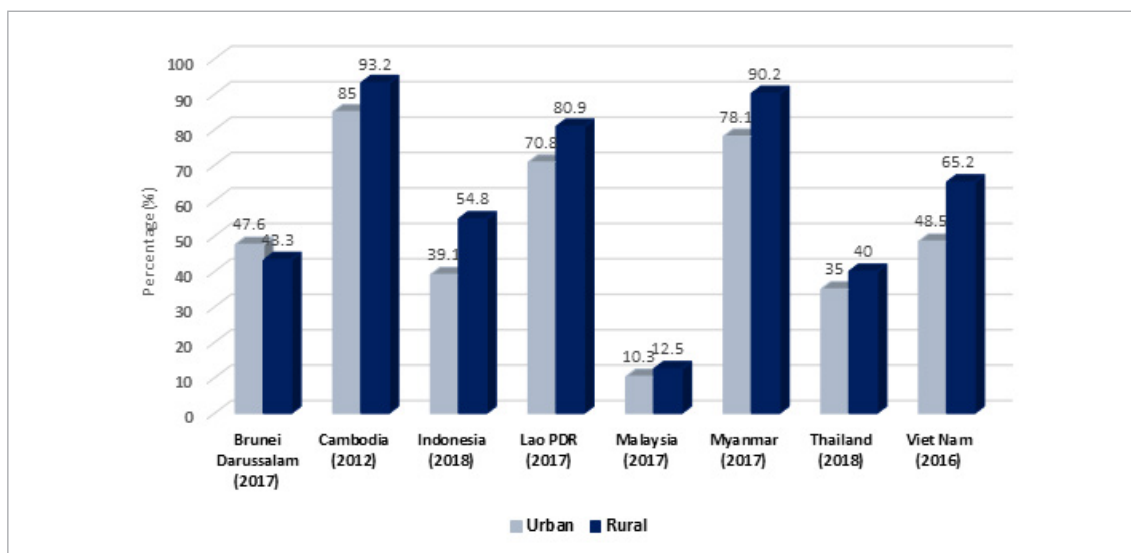


Figure 2.14. Rate of Informal Employment by Urban/Rural excluding Agriculture (%)

Source: ASEAN Statistic Division (2018)

Over the years from 2012 to 2018, the informal employment rate in urban areas ranges widely from 10.3% in Malaysia to 85% in Cambodia. In rural areas, it ranges from 12.5% in Malaysia to 93.2% in Cambodia (ASEAN Statistic Division, 2018). Comparing the available data of eight out of 10 AMS, informal employment is generally higher in rural than urban areas, except Brunei Darussalam. The rate of informal employment is generally higher for women than men except in Brunei Darussalam, Malaysia, and Viet Nam and as for the age group, the rate of informal employment patterns differs across the AMS.

2.4.2. Health Issues in AMS

2.4.2.1. Association of Social Determinants of Health (SDH) and Urban-Rural Linkages

Healthcare system promises universal access to healthcare for its beneficiaries, but health inequalities suggest that universal access alone does not ensure good health for all. Rather, health outcomes are due to a mix of factors, including income, working environments, and individual behaviour. Health can be improved by addressing the determinants that directly affect health by considering the importance of social factors in determining health outcomes. Thus, an intersectoral approach to tackle issues, such as eliminating barriers to education, scaling up social protection for neglected populations and improving housing conditions are needed.

A. Income and Social Protection

One of the determinants of socio-economic status is the family's income level. Studies show a clear and established relationship between income level and health outcomes. Specifically, people in poverty are impacted due to increased risks of disease and premature death. Many of the results in this report are shown by wealth quintiles, an indicator of the economic status of households. The resulting wealth index indicates the relative wealth level used as a proxy for expenditure and income measures.

Table 2.8. Household Wealth or Income in AMS

DHS Survey		Household Wealth or Income (2014-2017)				
		Lowest	Second	Middle	Fourth	Highest
Brunei Darussalam	n/a	n/a	n/a	n/a	n/a	n/a
Cambodia	17.65	18.65	19.6	21.15	23.05	
Indonesia	17.35	14.6	20.6	21.15	21.55	
Lao PDR	15.0	16.4	18.5	22.25	27.8	
Malaysia	n/a	n/a	n/a	n/a	n/a	n/a
Myanmar	23.0	17.2	14.9	14.5	13.3	
The Philippines	19.0	19.45	20.1	20.6	20.8	
Singapore	n/a	n/a	n/a	n/a	n/a	n/a
Thailand	n/a	n/a	n/a	n/a	n/a	n/a
Viet Nam	n/a	n/a	n/a	n/a	n/a	n/a
AMS Average	18.4	17.26	18.74	19.93	21.3	

Note:

1) Each household income calculated by a weight or factor score generated through PCA

Source: WHO

The focus on the environmental and social determinants of health has been accompanied by rapid changes in urban population rates worldwide. The rapid urbanisation of the 20th century reflects the world's changing political, economic, and social forces (Mumford, 1961) Therefore, as the city developed, the health of the urban population changed. As more people live in cities worldwide, it is essential to understand how urban life affects the population's health. This section looks at health determinants in urban and rural situations and then outlines some of the new problems that rapid urbanisation poses.

B. Education

Graduating from college has a positive impact on employment options. Higher education helps people secure better-paying jobs with fewer safety hazards. Income from these employment opportunities may improve health by increasing people's ability to accrue material resources, such as improved housing and psychosocial resources. Overall, higher education can improve health and well-being and reduce the risk of premature death. Education and health belong together. Studies show that students with poor health (such as pearl worms) and poor diets cannot learn well, and at least those with the lowest level of education can be more concerned about their health.

Education gives people the knowledge and skills to practice health, hygiene, and childcare. Girls who stay in school delay sexual activity, have fewer partners, get married later, and are less likely to develop HIV / AIDS. Girls' education is one of the strongest predictors of a child's survival. Half of the decline in child mortality over the last 40 years is due to women's education. Educated mothers seek prenatal care, seek qualified obstetricians, seek medical services, and learn about childhood illness management. Children whose mothers graduate from secondary school are twice as likely to live past five and 26% less likely to have stunts. The International Commission reports that all dollars, especially those investing in a year's increase in girls' school education, will generate nearly \$10 in middle-income health-related benefits in low-income countries and nearly \$4 in low-income countries (International Commission, p 35, 2016).

Table 2.9. Education in AMS

DHS Survey	Education (2014-2017)		
	No Education	NAR Primary	NAR Secondary and Higher
Brunei Darussalam	n/a	n/a	n/a
Cambodia	9.5	44.45	46.05
Indonesia	5.25	79.6	86.6
Lao PDR	11.35	33.05	55.65
Malaysia	n/a	n/a	n/a
Myanmar	19.0	83.4	60.2
The Philippines	4.45	93.1	78.2
Singapore	n/a	n/a	n/a
Thailand	n/a	97.0	83.5
Viet Nam	n/a	98.0	80.5
AMS Average	9.91	75.51	70.1

Note:

a) NAR = percentage of the secondary school age (13-18 years) population that is attending secondary school

Source: WHO

According to the FGD with AMS, rural areas in AMS have higher levels of unemployment and poverty and lower levels of education. The national average of people without adequate education is 18%, while that number jumps to 25% in rural areas. Low education in rural areas leads to lack of information to health education. Moreover, it leads to unemployment, unemployment leads to poverty, and poverty leads to inadequate access to healthcare services.

C. Unemployment and Job Security

Unemployment has negative health consequences. Those who are unemployed report feelings of depression, anxiety, low self-esteem, demoralisation, worry, and physical pain. Unemployed individuals tend to suffer more from stress-related illnesses such as high blood pressure, stroke, heart attack, heart disease, and arthritis. In addition, experiences such as perceived job insecurity, downsizing or workplace closure, and underemployment also affect physical and mental health.

D. Working Life Conditions

Multiple aspects of employment, including job security; the work environment; financial compensation; and job demands, may affect health. Job benefits such as health insurance, paid sick leave, and parental leave may affect the health of employed individuals. Two key functions of health insurance are access to affordable medical care and financial protection from unexpected health care costs.

Table 2.10. Working Life in AMS

DHS Survey	Employed (2014-2017)	Agricultural Work (2014-2017)	Non-Agricultural Work (2014-2017)
Brunei Darussalam	n/a	n/a	n/a
Cambodia	79.15	47.5	52.55
Indonesia	75.6	40.7	59.3
Lao PDR	n/a	n/a	n/a
Malaysia	n/a	n/a	n/a
Myanmar	78.55	54.4	45.6
The Philippines	46.2	10.3	89.7
Singapore	n/a	n/a	n/a
Thailand	n/a	n/a	n/a
Viet Nam	n/a	n/a	n/a
AMS Average	69.88	38.23	61.79

Source: WHO

E. Early Childhood Development

Early childhood, particularly the first five years of life, impacts long-term social, cognitive, emotional, and physical development. Healthy development in early childhood helps prepare children for the educational experiences of kindergarten and beyond. Characteristics of such programmes include a low student-teacher ratio, a focus on basic skills, and teacher training. Exposure to environmental hazards, such as lead in the home, can negatively affect a child's health and cause cognitive development delay.

F. Gender Aspects, People with Disabilities, Elderly People, and Children

Disability is defined as having, one or more, seeing, hearing, walking, concentrating, self-care, and communicating impairments. There is a notable association between disability and education. Household members who received no education are more likely to suffer from some level of disability among those who have a specific education level. Inequalities in disability were reported to demonstrate a higher prevalence in the socio-economically disadvantaged groups (the poor and less educated), the elderly, females and the unemployed.

The urban environment is a significant disparity in socio-economic status, an increase in the incidence of crime and violence, the presence of groups (such as sex workers) left out of high-risk societies, and psychological stressors associated with increased density. There are more likely to face the epidemic of the city's diversity (Freudenberg, 2000). Furthermore, rural women in the AMS, significantly less educated women, are more likely to sit down than urban women.

G. Access to Affordable Health Services of Decent Quality

Many health care resources are more prevalent in communities where residents are well-insured. Health care coverage through health insurance promotes access to medical goods and services and provides financial security against severe or unexpected illnesses (ODPHP, 2020). However, insurance coverage may not guarantee access to all essential health services because certain services may not be covered, and cost-sharing rules may still result in high costs for patients and their families. Access to care is influenced by various factors or barriers, including socio-cultural factors such as ethnicity and gender, geographical access, and lack of knowledge and awareness (NCBI, 2018). Many people face barriers that prevent or limit access to needed health care services, which may increase the risk of poor health outcomes and health disparities. Lack of health insurance coverage may negatively affect health (WHO, 2021). In contrast, studies show that having health insurance is associated with improved access to health services and better health monitoring.

Evidence suggests that rural residents have limited access to healthcare and that primary care physicians and services are inadequate in rural areas. This may be a result of higher costs associated with longer travel times and larger distances between physicians and patients compared with manageable distances in urban areas. In addition, in some rural areas, the proportion of uninsured and personally insured residents is higher than in urban areas.

2.4.3. Gender Equality and Social Inclusion Issues in AMS

2.4.3.1. Women and Urbanisation

A. Women and Urban-Rural Services

In rural settings, women are left with added household responsibilities in fulfilling its basic needs. A common example is water provision for households. Women and girls are often required to travel large distances, traverse tricky or possibly dangerous routes, and spend much of their time to extract and transport water for their household needs. Such activities reduce their time that could be otherwise spent on education, job, childcare, and leisure.

In more urbanised settings, women spend more time at home and in the neighbourhood than men. As such they are more immediately exposed to the environmental risks of inadequate sanitation and other health risks, such as infections caused by poor drainage, contact with human faeces, and rotting garbage. Despite being related to higher access to work opportunities, decreased fertility rates, and more independence for women, urbanisation does not always lead to a fairer income and equitable distribution. Urban poverty is rising faster than rural poverty in many low and middle-income countries (UNFPA, 2007).

In general, urban fertility rates are lower than rural fertility rates, which a variety of factors can explain: the higher costs (both monetary and time) of childcare; higher levels of education or exposure to choices and different lifestyle models such as later marriage (at an older age, especially for women); increased access to contraception; and greater participation of women in waged employment (National Research Council, 2003).

B. Women as Slum Dwellers

Women's socio-economic status and geographic location often determine their chances of becoming slum dwellers, however the degree of association vary in different gender contexts within AMS. For instance, men make up more than half of slum dwellers in Lao PDR, Indonesia, Thailand, and the Philippines. In Cambodia and Myanmar, contrastingly, women are the majority of slum dwellers (ASEAN, 2021b). Women slum dwellers are especially susceptible since they frequently face difficulties with water collection and cooking with unsafe fuels. In the Philippines, for instance, 21% of all women slum dwellers must travel more than 30 minutes to obtain water, compared to 3.7% of women urban non-slum dwellers. Similarly, 36% of women slum dwellers cook with unsafe fuels, compared to 15% of their non-slum urban peers. A supportive environment to enhance the lives of the urban poor, like providing slum dwellers with access to basic amenities, might transform hardship into economic, social, and environmental opportunities (ibid.).

C. Women in Urban Disaster Environments

Women tend to make fewer decisions and participate less in disaster management efforts. Nonetheless, they are frequently severely impacted. During a crisis, women confront huge obstacles in procuring adequate food and water, fuel for cooking and lighting, and wood or other construction materials to reconstruct wrecked homes—especially if harvests fail, droughts strike, and natural resources are exhausted. Women can and do contribute to disaster preparedness and community resilience. Promoting women's equal leadership in adopting more ecologically sound practices, such as fuel consumption (for cooking and lighting) and building materials. Women can help mitigate the harmful impact of disasters. Women also play an important role in mobilising communities in post-crisis rebuilding, and their involvement, capacity, and role in decision-making should be promoted further.

D. Urban Safety for Women

According to UN-Habitat (2017), both in public and private spheres, women and girls continue to face greater insecurity and vulnerability to violence, limiting their socio-economic potential and access to municipal services. Some women are also tasked with domestic responsibilities, childcare duties and caring for elderly relatives which can make it difficult for them to get to work. Therefore, it is critical that women are presented with safe and effective mobility options to enhance their access to essential urban services. Overcrowded transit options should be decreased and sidewalk access enhanced to improve and optimise women's mobility to and from their destinations, such as by lowering distances between bus stops at night.

Women in cities, particularly those living in low-income areas, are more vulnerable to violence. Furthermore, it encourages additional aggression from potential aggressors. For example, bathrooms located far from their houses might expose women and girls to violence and attacks if they travel alone to use them, particularly at night. Open defecation facilities, which provide little privacy, also pose significant safety risks to women.

2.4.3.2. Women in the Informal Sector

The situation of employment in formal, informal and household sectors is presented in Table 2.11. While gender disparity is prevalent in AMS labour markets both in terms of the gender distribution between formal and informal employment and within the informal economy, there is a lack of directly quantified gender-segregated statistics process in AMS's informal economy and informal employment. However, new measuring projects in several countries and data from other estimation sources demonstrate that AMS's informal sector is massive, multi-segmented, and segregated by gender.

Table 2.11. Rate of Informal Employment by formal/informal sector (workers in informal employment/total employed), excluding agriculture

Sectors	Brunei Darussalam	Cambodia	Indonesia	Lao PDR	Malaysia	Myanmar	the Philippines	Singapore	Thailand	Viet Nam
Formal sector	42,5	63,8	N/A	35,6	N/A	58,4	N/A	N/A	20,5	32,3
Informal sector	97,1	99,5	N/A	98,4	100	99,9	N/A	N/A	77,1	99,9
Household sector	-	96,3	N/A	98,9	-	100	N/A	N/A	17,9	99,9
All employed	46,6	90,3	N/A	75,4	10,6	84,1	N/A	N/A	37,1	57,2

Note:

- a) Informal employment is defined using official operational definition of country
- b) Rate of informal employment for a subgroup is defined as the number of informally employed in the subgroup divided by the total number of employed in the subgroup (e.g. Urban informal employment rate = Urban informally employed/Urban employed)
- c) In the case of Malaysia, informal employment is counted only for those in the informal sector and includes only workers up to 64 years of age, so figures for Malaysia are not straightforwardly comparable to those in other countries

Source: ASEAN Statistics Web Portal

Household poverty and lack of economic prospects in rural regions of Cambodia are driving women and men to migrate, increasing their exposure to labour exploitation and other dangers. Many ASEAN women work in low-wage, precarious occupations in the informal sector. Women encounter barriers in accessing financial services as well. According to the MGI, 49 percent of women in Southeast Asia are excluded from financial services, increasing their risk of sliding below the poverty line. Women in cities have the triple burden of paid jobs, unpaid care, and household labour. Women in rural regions face gendered norms that impede them from making independent decisions regarding paid jobs while still managing care-work and agricultural output (UNICEF, 2019).

2.4.3.3. Violence Against Women (VAW)

There can be no sustainable development if women and girls continue to face harassment, discrimination, sexual assault, and violence. There are compelling grounds for examining and revising institutions and procedures so that the multilateral system better represents the variety of the human family and offers women, youth, and other vulnerable groups in society a voice. In recent years, the ASEAN region has made substantial progress in combating VAW via coordinated policy action at

regional and national levels (ASEAN, 2018). The majority of AMS have established special national legislation on VAW and/or domestic violence, and some have produced National Action Plans to aid in the execution of laws and policies (Table 2.12).

Shelters, hotlines, and One-Stop Crisis Centres are among the services given by the government and/or civil society actors for women and girls who are or have been victims of violence, as are specialised women’s and children’s desks in police stations in various countries. Many nations have also conducted public awareness initiatives in order to attenuate acceptance of VAW. However, progress has been uneven, with some types of VAW, such as marital rape and other sexual violence, being excluded from current law. Data gaps on the extent and effect of VAW, low financial and human resources to support law enforcement and the implementation of support services, and the pervasiveness of discriminatory gender norms and stereotypes that condone VAW are all areas that demand more attention. Despite their mandate in the legislation, problems in VAW and support for victims persist in most AMS partly because of a lack of gender awareness and poor understanding of gender-based problems by law enforcement apparatuses.

Table 2.12. List of AMS with Dedicated/Comprehensive Domestic Violence Legislation

No.	Countries	Domestic Violence Legislation		Title of Legislation	Marital Rape
1	Brunei Darussalam	No	-	-	No
2	Cambodia	Yes	2005	Law on the Prevention of Violence and the Protection of Victims	No
3	Indonesia	Yes	2004	Law No. 23/2004 on the Elimination of Domestic Violence	No
4	Lao PDR	Yes	2014	Law on the prevention of Violence Against Women and Children	Law not yet translated to English
5	Malaysia	Yes	1994	Domestic Violence Act	No
6	Myanmar	No	-	-	No
7	Philippines	Yes	2004/2010	Anti-Violence against Women and Their Children Act (RA 9262) Magna Carta of Women (Republic Act 9710)	Yes
8	Singapore	Yes	-	<ul style="list-style-type: none"> • Women’s Charter 1961 (through 1996 amendments) • Children and Young Persons Act 1993 • Protection from Harassment Act 2014 • Penal Code 1871 • Vulnerable Adults Act 2018 	Yes
9	Thailand	Yes	2007	Protection of Domestic Violence Victims Act	Yes
10	Viet Nam	Yes	2007	Law on Prevention of and Control over Domestic Violence	Yes
Total		8/10			3/10

Source: ASEAN Regional Plan of Action on the Elimination of Violence against Women (ASEAN RPA on EVAW).

COVID-19 pandemic makes the situation worse as pressures from lockdowns, layoffs, supporting children who are studying from home lead to the rising number of domestic violence, and also decreasing support for women victims of violence from service providers due to them being halted or moved to online means to avoid direct interaction. Online gender-based violence is also on the rise. During the pandemic, more people became engaged in, and more time was spent on, online activities such as studying and working. On the one hand, these online activities provide safety and prevent people from being infected with COVID-19. On the other hand, online crimes and gender-based violence such as revenge porn and cyber sexual harassment have increased (Table 2.13).

Table 2.13. Proportion of Social Media Posts that referenced each of the topics considered, September 2019 to November 2020 (percentage)

Country	Misogyny, victim blaming and misconceptions	Religion, tradition and caste	Justice, law and regulations	Community support	NGO Support	Mainstream and social media roles in VAW
Thailand	22%	12%	29%	13%	4%	20%
Singapore	16%	4%	18%	26%	24%	12%
Malaysia	19%	23%	15%	20%	18%	5%
Indonesia	23%	3%	33%	28%	8%	5%
Philippines	26%	1%	38%	12%	22%	1%

Note: The percentages displayed have been calculated based on an overall sample size of 2,000 social media posts.

- a) Posts that display or discuss misogynistic beliefs and attitudes, blaming survivors/victims for their own assaults, or posts involving popular misconceptions.
- b) Posts where people give opinions on VAWG linked to religious beliefs, harmful cultural practices, or discrimination against certain castes. For example, posts that debate the relationship between VAWG and Islam in countries such as Malaysia.
- c) Posts that criticise treatment of victims/survivors of domestic violence by the justice system, calls for the passing of legislation that support victims/survivors of violence as well as vulnerable groups.
- d) Posts that display support for victims/survivors of violence and vulnerable groups.
- e) Posts from NGOs, mostly related to campaigns or help-seeking services for victims/survivors of violence as well as vulnerable groups.
- f) Posts that discuss the roles and effects of social media in perpetuating or combatting violence against women.

Source: COVID-19 and Violence against Women: The Evidence behind the Talk (UN Women, UNFPA, and Quilt.AI, 2021)

In Indonesia, data from the Legal Aid Foundation of the Indonesian Women's Association for Justice (LBH APIK) shows that there are 110 domestic violence cases reported during the first enactment of Large-Scale Social Restrictions (March 16th - June 20th, 2020). This number is half of the domestic violence cases throughout 2019. In Singapore, community-based Family Violence Specialist Centres and Integrated Services for Individual and Family Protection Specialist Centre received 41% more enquiries and took on 14% more new cases during the Apr 2020 to Mar 2021 period compared with the preceding 12 months. In Thailand, the Thai government's Social Assistance Centre manages 1300 Hotlines to assist women seeking to leave abusive and violent situations. The hotline receives more than 300 calls each day, a 34 percent increase compared to the same period last year (2019) (UN Women, 2020).

2.4.3.4. Children Who are Left Behind

There are currently no global estimates of the number of children who are “left behind” throughout the migration process. The number of children separated from their parents as a result of migration, as well as the socio-economic implications for children whose parents have relocated, are currently unclear. Job prospects for parents in other places are one of the numerous reasons why children are left behind. Often, parents in their community have few career prospects – or the existing positions may not pay enough to support a family.

Children with one migrant parent may be less likely to enrol in school, have deteriorating attendance, or drop out early. Older children, in particular, may experience additional domestic pressure to care for younger siblings, while others may lack parental support to finish their studies. Many “left behind” children might feel socially isolated, which is aggravated when they are unable to engage in communal life (UNICEF, 2010). According to the results of Indonesia’s 2012 National Socio-economic Survey (*Survei Sosial Ekonomi Nasional/SUSENAS*), more than 43.9% of children did not attend school due to cash shortages in the home. Other reasons given by the children were closely related to family economic situations, such as: (a) Male children answering that they had to gain work to help provide for the family and faced shame associated with one’s economic situation; and (b) female children answering that they had marriage and household responsibilities. Female children aged 7 to 18 who were no longer enrolled in school were almost always married.

According to BPS (2014), not all communities are located near a functioning school. Only 71,205 of Indonesia’s 78,736 communities had the means to provide residents with a functioning elementary school. The average distance between a given household and the nearest elementary school was 2.4 kilometres, 4.5 kilometres to the nearest junior high school, and 7 kilometres to the nearest senior high school (BPS, 2013).

2.4.3.5. Violence Against Children

According to research on the regional burden of violence in East Asia and the Pacific (Child Rights Coalition Asia, 2016), the entire cost of violence against children, especially on health and health risk behaviour consequences, costs USD 209 billion, or about 2% of the region’s GDP. The study says that experiencing or seeing violence as a child may have long-term implications on the individual’s welfare; and given its magnitude, it may considerably impair the socio-economic development of communities and nations.

Table 2.14. AMS Facts on Physical Violence against Children

Country	Physical Violence: Country Facts
Cambodia	<ul style="list-style-type: none"> • More than half of females and males aged 18 to 24 (52.7% and 54.2%, respectively) reported at least one incident of physical assault before the age of 18. • Girls and boys aged 13 to 17 years reported equal rates of experiencing physical violence at least once in their lives (61.1% and 58.2%, respectively). • More than three-quarters of all respondents who reported experiencing physical violence before the age of 18 reported several episodes.
Indonesia	<ul style="list-style-type: none"> • In 2014, there were 5,066 documented cases of child abuse. • The perpetrators of child abuse were 93% of the time close to the victims, with fathers accounting for 28 percent of the occurrences. • 40% of children aged 13-15 years reported being physically assaulted at least once in the previous year.
Lao PDR	<ul style="list-style-type: none"> • During their childhood, one out of every six children was subjected to physical assault. • Parents, guardians, adult caregivers, or other adult relatives were the most often reported perpetrators of physical violence during childhood (10.3%), followed by peers (6.5%), adults in the community (1.4%), and intimate partners (1.4%). • Physical violence was witnessed by 25.5% of children at home and 27.8% of children in the community.
Malaysia	<ul style="list-style-type: none"> • In 2011, the Ministry of Social Welfare reported 3,428 child abuse instances while the Royal Malaysian Police recorded 3,678 child abuse cases. • According to JKM, 44.3% of child abusers were parents, with mothers being the more likely abusers than fathers.
Philippines	<ul style="list-style-type: none"> • Three out of every five Filipino children have been subjected to serious physical abuse. 60% of these cases occurred at home; 14.3% of children encountered some kind of physical violence in school; 7.1% of children in the workplace throughout childhood; and around 2% of children with romantic partners while dating. • Males experienced physical violence in the family at a higher rate (66.6%) than females (62.5%). • Mothers were the most often cited perpetrators, followed by dads, brothers, and sisters. Fathers were held accountable for the more serious physical assaults.
Singapore	<ul style="list-style-type: none"> • In 2020, there were 677 child protection investigations for physical abuse conducted by the Ministry of Social and Family Development.
Thailand	<ul style="list-style-type: none"> • As a result of abuse, more than 19,000 children were treated in provincial hospitals. • Approximately 70% of the 19,000 children were treated for sexual abuse. The majority of cases happened at home and were inflicted by family members of the children.

Source: *Violence against Children in Southeast Asia (Child Rights Coalition Asia, 2016)*

As shown in Table 2.14, there are a few examples of reporting and complaint systems within internal authority apparatuses, such as police stations, detention facilities where a child is detained, or alternative care options. In Malaysia, the Criminal Investigation Division's Sexual Crime and Child Division (D11) provides a public complaints procedure through which victims and their relatives may voice their discontent with the investigation and interrogation processes. Children at Department of Social Welfare facilities in Myanmar can file secret complaints in boxes which are then reviewed by facility directors. Child Protection Committees inside schools in the Philippines are entrusted with developing internal referral and monitoring procedures. Children jailed in drug rehabilitation centres in Viet Nam can file complaints to the centre's leader through their legal counsel. At the moment, no information is known regarding the implementation of these processes, nor whether

they are sufficiently child- and gender-sensitive. However, the Committee on the Rights of the Child has emphasised the lack of complaint channels with courts and alternative care settings in its findings on AMS.

Table 2.15. A Country-by-country Breakdown of the Processes in Place to Receive Allegations of Violence against Children

Country	Mandated mechanisms to receive case reports
Brunei Darussalam	<ul style="list-style-type: none"> • Village leaders • Child Helpline • Emergency police hotline
Cambodia	<ul style="list-style-type: none"> • Commune police • Commune Committee for Women and Children • Child Helpline Cambodia (NGO run but TBC if mandated to receive reports)
Indonesia	<ul style="list-style-type: none"> • TESA 129 • P2TP2A
Lao PDR	<ul style="list-style-type: none"> • Child Protection Networks • Peuan Mit hotline • Lao Women's Union hotline • Ministry of Public Security hotline
Malaysia	<ul style="list-style-type: none"> • Childline Malaysia • Hospital-based Suspected Child Abuse and Neglect Teams and OSCC
Myanmar	N/A
Philippines	<ul style="list-style-type: none"> • Hotlines of Department of Child Welfare and Development; Child Health and Intervention and Protective Service; Anti-Child Abuse, Discrimination, Exploitation Division National Bureau of Investigation; Philippine National Police Operation Centre; Department of Justice Taskforce on Child Protection; Local Barangay Council for the Protection of Children • Women and Children Desk officer at police precincts
Singapore	<ul style="list-style-type: none"> • National Anti-Violence and Sexual Harassment Helpline (new name of helpline as of 1 May 2022) • Police Hotline and Neighbourhood Police Centres
Thailand	<ul style="list-style-type: none"> • 1300 Hotline-Social Assistance Centre of Ministry of Social Development and Human Security • SaiDek 1387 (Childline by The Childline Foundation Thailand)
Viet Nam	<ul style="list-style-type: none"> • Child Helpline Viet Nam • Child Protection Committee

Source: *Ending Violence against Children in AMS (ASEAN Secretariat, 2019)*

2.4.3.6. Child Marriage

The ASEAN area has one of the lowest rates of child marriage globally, with roughly 16% of females marrying before the age of 18 (ASEAN & UN Women, 2021). Most AMS has made progress in this area over the last 20 years but to eliminate child marriage, it will be necessary to educate and empower those living in rural areas and poor households because these are where girls face the most risk of marrying before the age of 18. For example, in Viet Nam's Central Highlands area, which has one of the lowest child marriage rates in the ASEAN region at 11%, 32% of its rural women live in the poorest households (ibid.). Given that child marriage is often

driven by both custom and economic scarcity, educating rural families and creating economic prosperity will be vital to eliminating child marriage throughout the area.

Nonetheless COVID-19 pandemic has hindered efforts to eliminate child marriage. Online or study from home programmes widely applied in AMS to minimise the impact of the pandemic result in unequal benefits. Poor children from rural and other areas are unable to gain maximum advantages of online learning due to poor IT infrastructure and internet connection. Because of this, some children stop studying altogether. Prolonged time out of school and employment may lead to increasing numbers of child marriages. While boys face a similar problem, there is a strong tendency that this phenomenon mainly affects girls.

2.4.4. Environment

Besides impacting the economic and social dimensions of sustainable development, urbanisation is closely tied to the environmental dimension. Environmental changes in urban areas are inevitable due to increased demands for food, energy, water, and land consumption. Cities occupy 3% of the world's lands, but they consume 75% of its resources and produce a similar percentage of the earth's waste (ASEAN, 2018a). Rapid urbanisation has resulted in environmental problems, and unfortunately, the problems experienced in smaller cities are often very severe as many have limited ability to manage the pressures of urbanisation (Roberts and Lindfield, 2014). All cities produce waste as they consume resources; this includes air pollution, greenhouse gas (GHG) emission, solid waste, and toxic effluents (ibid.), making cities the major contributors to climate change. Within Southeast Asia, the source of air pollution in rural areas is mostly from biomass burning followed by vehicle emission.

2.4.4.1. Disaster

Southeast Asian countries are exposed to various climate-related hazards, including floods, storms, tropical cyclones, droughts, and extreme temperatures. The constant risk of natural hazards in Southeast Asia forced all member states to understand disaster risk, including its dimensions such as exposure, capacity, hazard characteristics, environment, and vulnerability. According to ASEAN (2021c), disasters affected approximately 83.6 million affected people and resulted in the displacement of 7.1 million people between 2012 and 2021. Flood is the most occurring disaster in the ASEAN region over the same period where most flood occurrences were recorded in Indonesia (1,107 events), followed by the Philippines (103 events), and Malaysia (93 events) (ASEAN Disaster Information Network, 2021). As a result, 18.4 million people were affected and 2 million people were displaced (ibid.).

Due to various socio-economic, cultural, political, and geographical conditions, social threats and vulnerabilities due to disaster are uneven in the Southeast Asian region (Islam and Khan, 2018). Islam and Khan (2018) listed several common socio-economic threats and vulnerabilities within the region:

1. Direct human casualties
2. Loss of shelter
3. Loss of cash money and food
4. Loss of land and property
5. Loss of production

6. Unemployment and low income, mass poverty
7. Health hazards
8. Getting rooted out from the origin (including break-down of social networks)
9. Social vulnerability (among disabled, women and children)
10. Future disaster risks
11. Family separation and sexual and gender-based violence
12. Low coping strategies and low-level community residences and forced displacement

The same study also stated that poorly planned urbanisation, increasing population densities, population growth, and migration to the coast became key socio-economic changes that influenced hazard vulnerability in the region. The risk was higher on the urban poor as they were often forced to settle on exposed sites such as low-lying areas or along the banks of rivers and lakes (UN-Habitat, 2012).

Vulnerability is the level at which a population, organisational, or individual is unable to cope, anticipate, resist, and recover from the impact of disaster (WHO, 2002). Understanding vulnerability would help decision-makers, policymakers, and communities to devise effective resilience building strategies. By evaluating and prioritising disaster prevention and mitigation efforts as much as disaster response, the deployment of vulnerability index (VI) may assist decision-making.

Some countries have introduced key policies and strategies for gender and climate change. However, specific action plans have been slow to develop due to budget shortfall and lack of human resources. This could affect action plan implementation processes (ASCCR, 2021). Alternatively, some elements that contribute to vulnerability, such as disaster impact, economic constraints, information access, population pressure, and access to clean water may not be considered in action plan development. Therefore, to achieve effectiveness and efficiency, disaster risk reduction must be inclusive, multi-hazard, multi-sectoral, and accessible.

Risk is estimated by existing frameworks which utilises widely accepted standards. This risk methodology has been aligned with the International Strategy for Disaster's reduction risk evaluation standard from The United Nations. Two examples of developed risk estimation frameworks are: Index for Risk Management (INFORM) and ASEAN Regional Risk and Vulnerability Assessment (RVA). INFORM serves as an indicator to identify at-risk countries of humanitarian and disaster crises that could hinder national response capacity. Meanwhile, RVA acts as a function of coping capacity and multi-hazard exposure. In terms of the Vulnerability Index, both INFORM and RVA examine various economic, social, and political indices, impact of recent catastrophic shocks on the most vulnerable people, and environmental stresses.

The vulnerability components are related to socio-economic dimensions. They consist of Development & Deprivation (50%), Inequality (25%), Aid Dependency (25%). Based on INFORM and RVA indicators, the risk score comparison of vulnerability in each country (Table 2.16) showed Myanmar, the Philippines and Lao PDR as the top three countries with the highest vulnerability levels. Myanmar is the country most vulnerable to disasters because it lacks the resources to appropriately plan for, respond to, and recover from disasters. Despite being less socio-economically vulnerable than Lao PDR and Cambodia, the Philippines scored higher overall due to the cumulative impacts of recent disasters and its greater number of severely vulnerable individuals (ARMOR, 2020).

Meanwhile, for the Philippines, the high vulnerability level is due to recent disaster impacts which aligned with the high score of multi-hazard exposure. Whilst other hazards such as volcanoes, earthquakes, floods, and drought are also becoming potential hazards in the Philippines; the most frequent and destructive hazard is typhoons. For the last ten years, the frequency and severity of typhoons have worsened. The impacts of typhoons also contributed to the lack of natural barriers in the island and the sea. Typhoon events could bring such a massive impact on their lives, economy and livelihood. For example, in 2013, typhoon Haiyan (Yolanda) resulted in more than 6,300 lives lost, four million displaced citizens, and US 2 billion in damages (ARMOR, 2019). Some areas considered more vulnerable to typhoon than the others based on its geographical and socio-economic condition. Coastal area such as Eastern Samar was heavily impacted during the Haiyan Typhoon (IOM, 2014). The vulnerability is higher especially for population of informal settlement in urban area where the communities cannot access proper housing and other infrastructures (Morin et al, 2016).

Another interesting fact related to the vulnerability risk within AMS countries is Cambodia. Its vulnerability is primarily due to lack of informational access. This vulnerability is related to the people's ability to identify and use data and information resources. Cambodia's literacy rate was the lowest among all AMS, about 78% (ASEAN Statistical Yearbook, 2015). This fact is strengthened by education experts who expressed that key challenges remain in providing adequate education for rural poor, minorities, and girls. The gap was wider between urban dwellers (90.4%) and rural areas (74%), including minority groups (VOA, 2011). The literacy rate level may be at the root of informational access barriers.

Table 2.16. The Risk Score Comparison of Vulnerability and Climate Change Rank in each AMS Country

Countries	Rank (Based INFORM and RVA score)	Vulnerability Score / Vulnerability group	Climate Change Rank	Hazard
Brunei Darussalam	9	0.8/10 0/0	9	Flooding, Landslide, Forest Fire
Cambodia	4	3.9/10 1.6/10	2	Flood, Drought, Storm and Lightning
Indonesia	5	2.5/10 2.7/10	5	Flooding and landslide, volcanoes, earthquake, drought
Lao PDR	3	3.6/10 1.9/10	3	Flooding (Mekong River), Drought, Landslide, Earthquake
Malaysia	8	3.0/10 3.6/10	8	Flooding, landslide, drought, forest fire, earthquake, tsunamis
Myanmar	1	5.5/10	1	Earthquakes and tsunamis, drought, forest fires, landslide, floods, tropical cyclones and storm surge, industrial and technology hazard, deforestation
Philippines	2	4.2/10 5.6/10	4	Typhoons, volcanoes, earthquakes, floods, drought
Singapore	10	-	10	-
Thailand	6	3.1/10 4.1/10	7	Flooding, typhoon, landslide, drought, earthquakes, tsunamis.
Viet Nam	7	1.8/10 1.0/10	6	Flooding and landslides, volcanoes, earthquakes, drought

Source: *Armor 2nd edition (2020)*

Disasters could result in the displacement of communities. Disaster mitigation should be assessed to promote preparedness and effective response to environmental hazards. This includes gender-focused interventions, leveraged cash transfers for refugee and host communities, risk pooling and transfer instruments, and food security assessment and monitoring tools. Women and children should be the priority when relocating to another location. The information flow links urban and rural areas in terms of opportunities, resources, and relief efforts. Components such as rate and flow of information, transportation, and connectivity are essential. Rural residents can have important roles in recovery, for example, by providing support for urban residents suffering from trauma. Knowing each AMS key vulnerabilities helps decision makers devise strategies and action plans to mitigate and adapt disaster management within the urban-rural continuum.

Women and girls in Cambodia are vulnerable due to low levels of education and literacy, gender gaps, and lack of economic empowerment. Similar conditions are found in Lao PDR where less than 80% of the Laotian women are literate. Women in Lao PDR are prone to Gender-Based Violence (GBV). Women in Myanmar are more vulnerable to disasters because of social economic gaps between women and men. Women in Philippines are vulnerable due to lack of specific services such as Menstrual-Hygiene-Management (MHM), prenatal and postpartum healthcare

during emergencies. Similarly specific needs are not met for women in Indonesia during emergencies which increases their vulnerability. In Viet Nam, women and persons with disabilities are more severely impacted by the effects of climate change.

Poverty level contributes to the vulnerability of disadvantaged communities in AMS. Around 35% of Cambodians who live in poverty are concentrated in rural areas, leading to them being more vulnerable to disasters. Rural-urban migration in Lao PDR is stimulated by lower poverty levels in urban areas (7%) compared to rural areas (23%). Poverty is a significant issue in Myanmar where a quarter of the population lives below the poverty line. Similar to Lao PDR, poverty levels in Myanmar’s rural areas (38.8%) are higher than urban areas (14.5%). Poverty is also affected by geographical dimensions. In Myanmar, around 65% of the poor live in dry zones and deltas. Malaysia, in comparison with other AMS, have largely reduced extreme poverty and is close to ending it. However, the country still grapples with socio-cultural problems such as inequalities between major ethnic groups.

Approximately one in three children under five years old in Cambodia and Lao PDR suffer from stunting and/or malnutrition (Global Nutrition Report, 2021). Children in Indonesia experience issues related to exploitation and trafficking. In Viet Nam, children are also included as vulnerable groups due to their likelihood of drowning during floods. Persons with disabilities, the elderly, and refugee or other displaced communities are included as vulnerable groups in some ASEAN member states.

From the economic perspective, Annual Average Losses (AAL) from natural hazards in Southeast Asia are primarily caused by droughts, at 60%, compared to floods, tropical cyclones, earthquakes, and tsunamis (Figure 2.15).

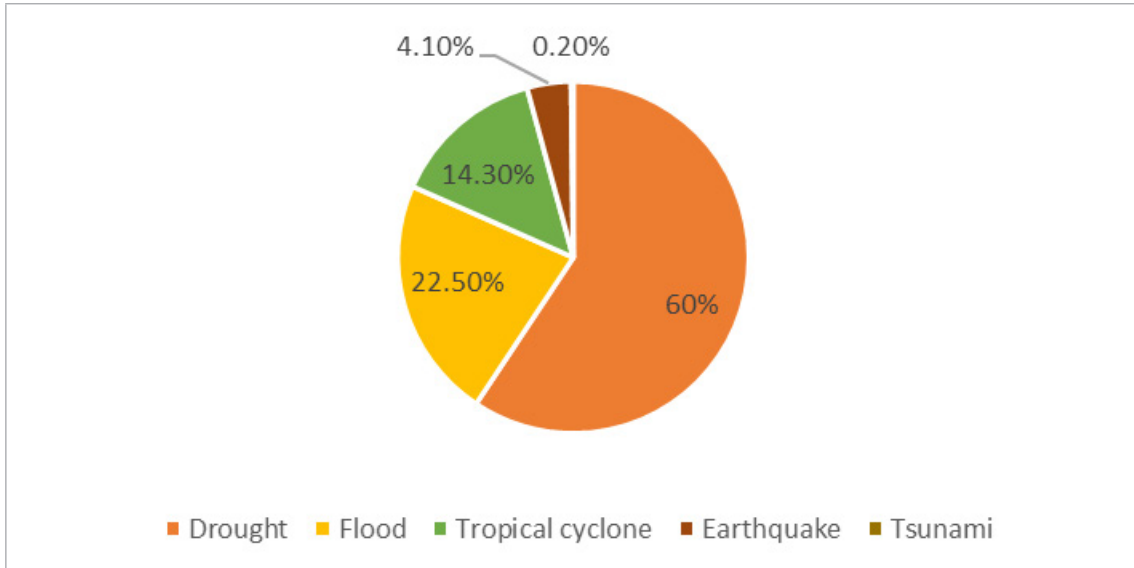


Figure 2.15. Annual Average Losses caused by Major Natural Hazards in Southeast Asia

Source: ESCAP, 2020

Economic impacts measured from AAL will translate into significant human impacts (ESCAP, 2020). ESCAP (2020) stated that there is a high correlation between drought exposure and drought vulnerability with levels of socio-economic development. Countries that have high exposure and vulnerability to droughts, and low human development index, such as Cambodia and Lao PDR are at the highest risk. Across Southeast Asia, 104 million people or approximately 34% of the employed populations depend on agricultural livelihood.

However, ESCAP (2020) stated that land degradation due to human activities threaten to aggravate agricultural drought as human activities are driving soil erosion, deforestation and depletion of water resources. Land degradation happens mainly in regions with low levels of socio-economic development and high population density, such as parts of Cambodia, Indonesia, Myanmar and Viet Nam (ESCAP 2020). As urbanisation intensifies, large agricultural areas are being removed and replaced by commercial, residential, or industrial areas. It resulted in a new rice landscape alongside the development of irrigation networks. Within the dynamics of the economy and demographic growth, the crises associated with drought are redefining access and sharing of water resources. Thus, exploiting rice cultivation has become more difficult (Nguyen et al., 2021).

Climate change impacts, including storms, drought, and floods, will eventually lead to greater temporary displacement and permanent migration flow. Adverse impacts of climate change may induce the migration of rural communities to cities, thereby escalating the underlying drivers of climate vulnerability in urban areas (DePaul, 2012). Newly arrived populations tend to cluster in low-cost housing that are exposed to environmental hazards. Lack of resources to deal with exposed populations and justification in moving them to other, less exposed locations pose additional problems for planning authorities. Exposed communities are reluctant to move without incentive. Therefore, planned immigration becomes important to respond to climate change, such as identifying localities at risk of depopulation and assessing potential areas for relocation.

A solution could be the realisation of resilient and adaptive communities that can build resilience to disasters by strengthening structure/infrastructure and social and financial capitals. Another solution could be to establish urban-rural support systems which may involve some market-based mechanism and knowledge/technologies transfer to prevent unwanted externalisation from unplanned urbanisation.

2.4.4.2. Vulnerability to Climate Change

ASEAN is highly vulnerable to climate change impacts. Rising temperatures and more unpredictable and extreme rainfall will further expose urban and rural areas to vulnerability caused by climate change (ESCAP and UN-Habitat, 2018). Rising sea levels caused by global warming and floods are also the most far-reaching impacts of climate change, making cities in ASEAN particularly at risk (ASEAN, 2018a). The climate risk index by Armor (2020) showed that there are five countries negatively affected by climate change in the world, including five from AMS, which are Myanmar, Cambodia, Lao PDR, Philippines, Indonesia. This is consistent with ESCAP (2020) that stated the climate-related hazards, such as flood, drought, and cyclone, coincide in densely populated areas, showing four areas of high multi-hazard exposure within Myanmar, Lower Mekong River Basin, the Philippines and Java, Indonesia. Climate vulnerability in ASEAN is driven by several factors.

1. Urbanisation

The socio-economic threats and vulnerability, including loss of land and property, loss of production, unemployment and low income, and forced displacement, may increase vulnerability as rural communities migrate to urban areas to seek shelter and employment due to climate-induced disaster (Islam and Khan, 2018). Poor living conditions and informal settlements within urban areas increase migrants' vulnerabilities. Since urban areas play a bigger part in macroeconomic

growth, they emit more greenhouse gases and consume more natural resources. Examples are Singapore, Kuala Lumpur, Bangkok.

2. High Dependency on Natural Resources and Agriculture

Some nations are extremely reliant on such resources since they account for more than 20% of their national GDP. Lao PDR, Cambodia, and Myanmar dependent their GDP from agriculture sector and particularly vulnerable to the effects of climate change (Nawaz et al., 2019).

3. Increasing Severity of Natural Hazards

Climate change is affecting the degree, severity, and duration of many natural hazards such as droughts, floods, and typhoons. As the populations of coastal cities increase due to better livelihood prospects, natural hazards may have a greater impact on business-as-usual scenarios in the future. Cities in AMS are largely underprepared for natural disaster risks, especially regarding vulnerability and risk assessment practices. Rural areas considerably experience worse effect of natural hazards and climate change since the economic inequalities increase and quality of life continue to deteriorate (Anbumozhi, 2020).

4. High Level of Deforestation

High deforestation rates in non-urbanised areas combined with high habitat and biodiversity losses due to human activity may increase up to 40% by 2100 (Estoque, et al., 2019). Deforestation endangers communities and economic productivity by attenuating the critical functions and ecological services that forests provide.

5. High Level of Economic Activity on Coasts

The coastline in Southeast Asia is around 234,000 km (PAMSEA, 2013), where key ports and major cities can be found, and around 77% of the region's population lives in these areas. 229 million people reside in vulnerable coastal regions, defined as places below the high tide line, accounting for 39.4% of AMS' total population (Kulp & Strauss, 2019). Indonesia (72 million people) has the most people living below the high tide line, followed by Viet Nam (60 million), the Philippines (36 million), Thailand (22 million), Myanmar (18 million), Malaysia (12 million), Cambodia (7.1 million), Singapore (1.9 million), and Brunei (0.22 million) (Kulp & Strauss, 2019). Meanwhile, David et al. demonstrated how vulnerable coastal communities and businesses are to rising sea levels. Cluster 1 has a very high coastal population (Viet Nam), cluster 2 has a moderate coastal population (Thailand, Malaysia, and the Philippines), cluster 3 has a minor coastal population (Cambodia and Singapore), and cluster 4 has a very high population and wetland area exposure (Indonesia).

6. High Propensity to Migration

Huge segments of migrant populations residing in areas exposed to slow and sudden onset hazards may soon become an additional source of risk. Free mobility has provided millions of people with new and lucrative economic opportunities and cultural integration; it also can strain certain areas of the region that already have high population densities, resulting in natural resource degradation, competition, and congestion.

7. Global and Regional Integration

ASEAN produces over 28% of the world 's rice crop and 31% of Asia 's rice; thus, any changes in rainfall patterns can have significant food security ramifications for the region and beyond. During the global food price crisis of 2008, for example, certain ASEAN nations implemented export prohibitions on rice, resulting in price increases for importing countries (Childs & Kiawu, 2009). On the other hand, ASEAN establishes itself as the world 's second-largest industrial hub, with linkages to global supply networks. In the last 20 years, urbanisation in the vicinities of the Bangkok Metropolitan Region has led to the disappearance of natural areas of water retention and floodplain that play a key role in managing excess water and limiting flood damage, as was the case for the 2011 floods. The 2011 Bangkok floods demonstrated the destabilising potential of such occurrences on the regional and global economy (Prabhakar & Shaw, 2020).

The Mekong River, which is a transboundary river, considerably aids regional integration and creates opportunities for collaboration among the river's neighbouring countries. The Mekong River and the Red River management will be a high-priority transboundary problem connected to environmental deterioration and climate change. Tensions between riparian nations over water distribution, management, and quality may rise as a result of decreased water supply owing to altered seasonal precipitation patterns and upstream hydroelectric, agricultural, and urban development. Due to increased economic activity and population shifts, forest and land degradation pressures are projected to persist throughout Viet Nam's borders, harming transboundary protected areas with the Lao PDR and Cambodia. Commitment to regional power transmission and transportation connections is becoming increasingly important throughout the Greater Mekong Subregion (GMS), with vast infrastructure and cumulative environmental and social consequences that need strategic planning and assessment. With rising water demand along the river, significant unpredictability in river flows, high danger of large-scale floods, and diminishing fish supplies, there is an opportunity for even more collaboration among the Mekong countries, which is critical to the region's prospects.

2.4.4.3. Greenhouse Gas Emission

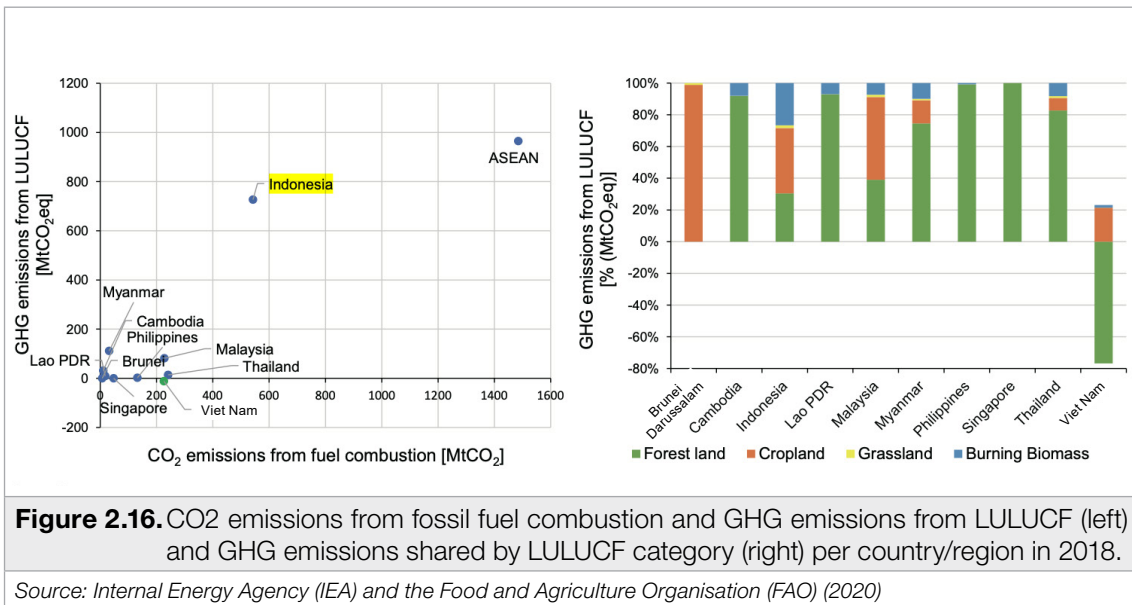
Urbanisation is seen as an important factor of a nation's economic development, especially developing economies (Al-Mulali et al., 2012). The increase in urban population is linked with high energy demand and perpetual environmental issues (Sadorsky, 2014). Urbanisation is a direct source of Carbon Emission (CE), which consumes 84% of the total commercial energy (Zi et al., 2016). Urbanisation encourages fossil fuel and energy consumption through transportation and industrialisation producing CE (Jones, 1991; Hossain, 2011). Economic growth and urbanisation also lead to demand for construction, thereby releasing pollutants to environments through more energy consumption. Urbanisation has a positive correlation at all levels of developments with CE, which is shown through positive bidirectional causality (Al-Mulali, 2013), 1% increases in urbanisation causes a 0.95% rise in CE (Ponce de Leon & Marshall, 2014).

ASEAN, which is among the fastest expanding regions in the world (Silitonga et al., 2017; Vo & Le, 2019), produces most of its energy through fossil fuel burning. It is supported by low energy prices from government subsidies that increases

economic growth (Ismail, Moghavvemi, & Mahlia, 2013; Simpson & Smits, 2018). As a result, ASEAN also emits large amounts of greenhouse gases (Mofijur et al., 2019).

In terms of emission sources, AMS emitted around 1.485 MtCO₂ from fossil fuel combustion and around 965 MtCO₂eq from Land Use, Land Use Change and Forestry (LULUCF) in 2016 (ASCCR, 2021). Based on Figure 2.16, Indonesia became the largest net emitter of GHGs from land use and fuel combustion, due to Indonesia's deforestation and peatland exploitation. Thailand, Malaysia, Viet Nam and the Philippines are also on track for more emissions in the future. However, Viet Nam managed to record negative GHG emissions from LULUCF as a result of adopting measures such as forest protection and conservation, forest replenishment, and better planning and prioritisation (Viet Nam's Nationally Determined Contribution, 2022).

Linear with increased population and urbanisation, CO₂ emissions from energy use in the power, manufacturing, and transport sectors also increase. Power sector has become the largest source of direct CO₂ emissions in AMS except Cambodia, where the transport sector has larger emissions. Southeast Asia's overall energy demand is projected to reach 60% by 2040 (IEA, 2019). At the same time, 120 million more people will be concentrated in urban areas (The Southeast Asia Energy Outlook, 2019)



The rate of carbon dioxide (CO₂) emissions has increased by 6.1% annually in ASEAN, which is more than two times higher than the urban population growth (ASEAN, 2018a). Each AMS has individual emission reduction targets. Targets are calculated based on planetary pressure adjusted human development index (PHDI). The PHDI is the level of human development adjusted by carbon dioxide emissions per person (production-based) and material footprint per capita to account for the excessive human pressure on the planet. Each AMS' PHDI level and carbon dioxide emission per capita showed in Table 2.17.

Table 2.17. PHDI Level, Carbon Dioxide, Material Footprint, and GHG Emission for each AMS Country

Countries	PHDI	Carbon dioxide emissions per capita (production) (tonnes)	Carbon dioxide emissions (production) index	Material footprint per capita (tonnes)	Material footprint index	Total GHG Emission Including LUCF (MtCO ₂ e)
	2019	2018	2018	2017	2017	2018
Brunei Darussalam	0.672	18.5	0.735	20.0	0.869	16.95
Cambodia	0.584	0.6	0.991	3.6	0.976	69.15
Indonesia	0.691	2.3	0.967	6.3	0.959	1703.86
Lao PDR	0.586	2.7	0.961	7.5	0.951	38.63
Malaysia	0.699	8.1	0.844	24.2	0.842	388.11
Myanmar	0.578	0.5	0.993	1.4	0.991	231.62
Philippines	0.701	1.3	0.982	4.4	0.971	234.82
Singapore	0.656	7.1	0.898	76.1	0.501	66.67
Thailand	0.716	4.2	0.941	15.0	0.902	431.22
Viet Nam	0.664	2.2	0.969	12.7	0.917	364.43

Source: UNDP (2019b), Climate Watch (2022)

2.4.4.4. Biodiversity and Ecosystem Services

Southeast Asia is one of the world’s most biologically diversified regions, yet it is also one of the most endangered (Lechner et al., 2021). 4 out of 36 biodiversity hotspots globally are located in Southeast Asia. Urbanisation in Southeast Asia has harmed the natural environment, both directly and indirectly, by converting forests to infrastructure and increasing natural resource use and pollution (ibid.). Changes to agricultural approaches to meet rising demand, such as high yielding varieties and monoculture, increase the risk of genetic material loss (IPBES, 2018).

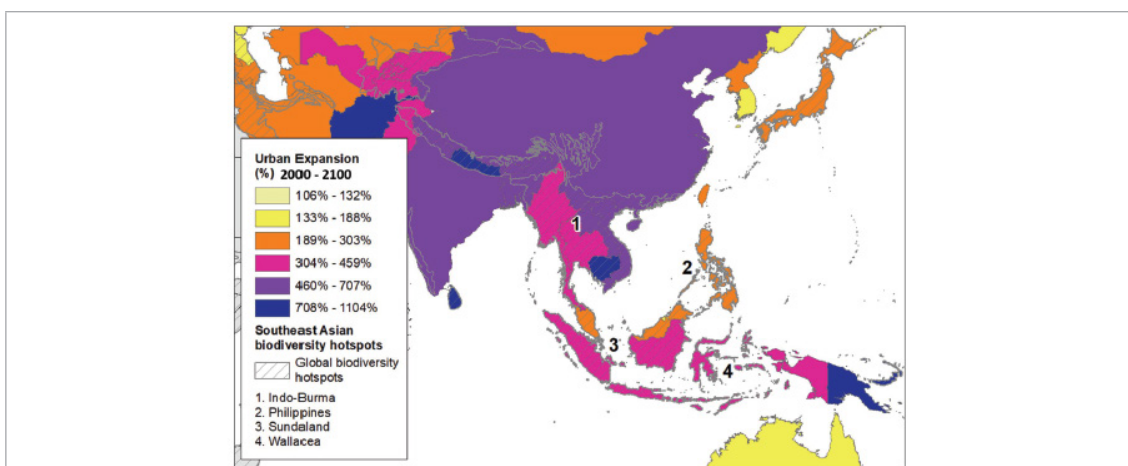


Figure 2.17. Southeast Asian biodiversity hotspots and projected urban land expansion

Source: IPBES (2018)

As built-up areas expand, green spaces gradually decrease and become more fragmented. In the case of Indonesia, the Philippines, and Malaysia, built-up areas expanded and obtruded green areas by 30% (Nor et al., 2021). Jakarta and Manila had higher percentages of built-up areas compared to green spaces than Kuala Lumpur, where green spaces became less

connected and more diffuse (ibid.). Similar findings were reported in other AMS . In Brunei Darussalam's capital city, low-density residential developments promoted urban growth. Land use change happened as public houses typically existed in isolated, low-density pockets at the city-fringe (Ng et al., 2022). Urbanisation in Phnom Penh has converted arable land, vegetation, and water bodies into built-up areas. As a result, urban areas expanded outward in southern, northern, eastern and western directions of the city between 2002-2015 (Mom & Ongsomwang, 2016). Similar findings were observed in Vientiane, Bangkok, and Ha Noi (Epprecht et al., 2018; Palacheeva, 2020; Pham et al., 2013; Do et al., 2018).

Meanwhile, Myanmar has relatively low urban expansion and conversion of green spaces (Myanmar's Ministry of Construction, 2020). However, Myanmar still experienced significant land use change in secondary city, Pyin Oo Lwin (Helen et al., 2019). From 1988 to 2018, the urban built-up land increased 5-fold and urban forest percentage decreased from 52.54% to 35.02% (ibid.).

The loss and fragmentation of green spaces along with human activities have significant consequences to biodiversity. According to a global analysis, the expansion of urban areas in East and Southeast Asia may have a disproportionate impact on protected areas, with more protected areas projected to be within 10 kilometres of a city by 2030 in Southeast Asia, more than any other region. The decreasing distance will increase potential disturbance and loss of biodiversity (Hughes, 2017).

In Chao Phraya River, Thailand, ports located within large cities downstream have high species diversity but relatively small populations of large trees (Asanok et al., 2021). In the case of the Mekong River, where the basin sustains the livelihood of around 80% of the nearly 65 million people living in the Lower Mekong River Basin, the flooding of the Mekong River is recursive (Mekong River Commission, 2021). The annual flood is seen as the source of livelihood as it drives the basin's fisheries, maintains river morphology and deposits sediments to improve soil fertility. However, the flood may also result in human losses, economic damage, and food insecurity (ibid.). Whilst living conditions within the basin are rapidly improving in general, it puts additional strain to the environment as a result of permanent modifications to the mainstream flow regime, a substantial reduction in sediment flows, continuing loss of wetlands, deterioration of riverine habitats, and the growing pressure on capture fisheries (MRC, 2019).

Rapid population growth, shifting socio-economic status, technological and industrial capabilities, and urbanisation across the region are all contributing to an increase in waste production. South-East Asia, as one of the world's top five plastic waste polluters, carries the most plastic waste (IPBES, 2018). The waste will threaten blue space in urban-rural areas as well as ocean. According to global study in 41 tropical countries, progressive urbanisation also has positive correlation with increasing rates of deforestation due to urban-based and international demands for agricultural products (Hughes, 2017; DeFries et al., 2010). It is predicted by IPBES (2018), in South-East Asia, crop production has the greatest influence on future biodiversity losses based on current trends.

2.4.4.5. Urban-Rural River Management

Urban expansion in Southeast Asia has mainly happened in river deltas and floodplains (Tierolf et al., 2021). There are significant urban-rural linkages regarding land use. Changes in rural land cover will alter the hydrological regime (Osti, 2020). Urban development increases runoff and stormwater drainage lessen retention capacity of the flood plain (ibid.). It leads to more serious flooding in urban areas. From urban development modelling, urban expansion in Lao PDR, Cambodia, Myanmar, Thailand, and Viet Nam, will increase of frequency and intensity of floods (Monprapussorn & Ha, 2021; Tierolf et al., 2021).

Urban population growth and intensification of socio-economic activities lead to higher urban water use in the future. The reduction of green spaces due to land use changes and built environment in peri urban or rural area will lessen water catchment areas, decreasing infiltration process. Excessive groundwater extraction, uncontrolled urban and built areas, deforestation for agriculture, as well as water pollution can lead to water crises in the long term. An integrated policy and infrastructure between rural and urban area is needed to build water-sensitive cities.



3.

EXISTING POLICY RESPONSES IN ASEAN TO PROMOTE SUSTAINABLE DEVELOPMENT AND URBANISATION

This study takes into consideration that there is clear alignment between frameworks that are regionally available in ASEAN and those at the global level with regard to urbanisation, rural development, migration, and sustainable urbanisation, but less so on urban-rural linkages and continuum. In relation to the health aspect, there are a plethora of ASEAN and global frameworks available, however only few specifically address the impact of urbanisation and migration on health. As such these frameworks require further updating. On the GESI aspect, there is no specific GESI-related regulation in terms of urbanisation. However, Convention on the Elimination of all forms of Discrimination against Women (CEDAW), Convention on the Rights of the Child (CRC), and Convention on the Rights of Persons with Disabilities (CRPD) have been commonly used to protect women's, children's, and PWDs' rights in general. Those conventions have been adapted by ASEAN and are relevant for addressing urbanisation impacts vis-à-vis GESI aspects.

In terms of education, ASEAN already has a work plan on education updated every five years and adopted by AMS, however those overarching goals were not specifically related to urbanisation and its dynamics in terms of access to education. Within the context of the environment, ASEAN key documents on environmental cooperation, disaster management, biodiversity and climate change have mainly addressed urban and rural context separately and have not comprehensively addressed the implications of urban-rural continuum for both vulnerability and capacity to mitigate or adapt to risks.

At the national level, policies in AMS, particularly those concerning development and spatial planning have recognised the importance of urban-rural linkages as one of the issues corresponding to urbanisation processes, and in terms of overcoming, or minimising the risk and negative impact of rapid urbanisation and development. As for the health aspect, there is no national policy that clearly regulates the impact of urbanisation and migration on health and quality of life. On the GESI aspect, similar to the global and regional level, CEDAW, CRC, and CRPD have been adapted by AMS in response to the impact of urbanisation, especially to enhance the GESI aspect. In the context of employment, regulations aimed to protect workers from vulnerable groups and assuring access to health insurances have already been established in some AMS. However, there have been no specific policy governing urban-rural migrant workers. In terms of the environment, there are good practices as well as limitations on national and sub-national development and spatial planning policies that leverage urban-rural continuum for disaster risk reduction, climate change adaptation, and climate change mitigation (reduction of emissions). However, proliferation of good practices within the region is still limited.

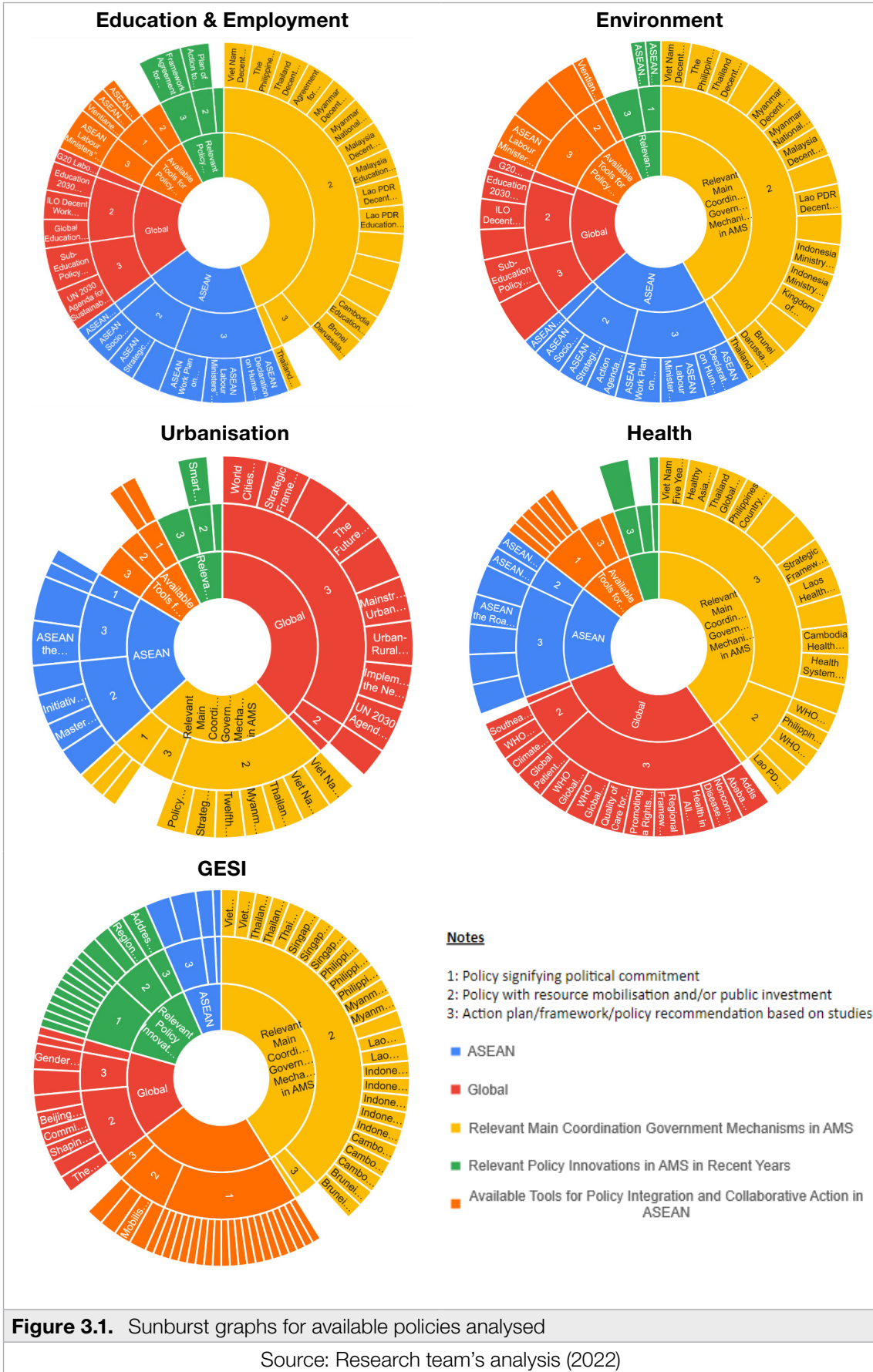


Figure 3.1. Sunburst graphs for available policies analysed

Source: Research team's analysis (2022)

The policy analysis has also assessed existing efforts at the global, regional, and national level in addressing issues in each related sectors and how urbanisation could give an impact to the development of the sectors. From 231 policies analysed for this section, it was found that each sector has different results on what the policies represented, e.g., policies which signifies political commitment (providing only commitment/declaration/statement), policy with resource mobilisation and/or public investment (providing work plan and/or indicators, and/or budgeting), and action plan/framework/policy recommendation resulting from the studies.

3.1. Relevant Actions/Sectoral Plans/Strategies

This section discusses relevant actions, sectoral plans, and strategies regarding urbanisation, education and employment, health, gender equality and social inclusion, and the environment from existing ASEAN and global frameworks. Acknowledging these regional and international frameworks could open possibilities to create synergies in promoting sustainable development and urbanisation.

3.1.1. Global Frameworks

3.1.1.1. Urbanisation

Several global frameworks have signalled effort emphasising on the importance of urban-rural linkages and rural development. This was done to reduce inequality between urban and rural areas in order to ensure that no one is left behind. This effort is particularly demonstrated through several UN-Habitat's frameworks: (1) Implementing the New Urban Agenda by Strengthening Urban-Rural Linkages (2017); (2) Urban-Rural Linkages: Guiding Principles, Framework for Action to Advance Integrated Territorial Development (2019), and; (3) Mainstreaming Urban-Rural Linkages in National Urban Policies (2020). These frameworks have provided the necessary interventions and practical recommendations to mainstream urban-rural linkages and showed that several policies in AMS have incorporated the recommendations into their country context. The effort to develop and focus on rural areas in order to achieve sustainable development is also shown in the FAO's Strategic Framework 2022-2031 (2021) where FAO's four organising principles intends to contribute directly to SDG 1 (No poverty), SDG 2 (Zero hunger), and SDG 10 (Reduced inequalities) for better production, better nutrition, a better environment, and a better life.

To address the challenges and respond to the rapid urbanisation and migration, several documents have highlighted the importance of sustainable urbanisation and urban development in the developing world. It includes the UNDP's Sustainable Urbanisation Strategy (2019), ESCAP's The Future of Asian & Pacific Cities: Transformative Pathways Towards Sustainable Urban Development (2019), and IOM and UN Habitat's MMICD Urban Development Toolkit: Integration Migration into Urban Development Programs (2021). These documents have identified important aspects for intervention in integrating migration into urban development, city-making, and providing tools and guidelines to help cities achieve the 2030 sustainable development goal for inclusive, safe, resilient, and sustainable cities.

In responding to the COVID-19 pandemic, global frameworks have taken into account how the pandemic is shifting the way of life, affecting territorial and urban governance as well as urban development and urbanisation. Global frameworks which have done so are: (1) ESCAP’s The Future of Asian & Pacific Cities: Transformative Pathways Towards Sustainable Urban Development in the Post COVID-19 Era (2020); (2) UN Habitat’s World Cities Report: The Value of Sustainable Urbanisation (2020), and; (3) COVID-19 through the Lens of Urban-Rural Linkages - Guiding Principles and Framework for Action (URL-GP) (2020). These documents have revisited several preceding documents and provided critical review, insights, and recommendations for interventions in response to the pandemic in the national level.

3.1.1.2. Education and Employment

A global framework that is used as a fundamental principle of education and employment is the Sustainable Development Goals, particularly Goal Number 4: ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all, along with Goal Number 8: Promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Departing from this, the United Nations Agency related to education and employment has developed follow-up frameworks listed in the table below.

Table 3.1. Global Framework in Education and Employment

Global Framework	Framework Review in the Urban and Rural Context
Decent Work and the 2030 Agenda for Sustainable Development	Aims to reduce inequality and increase resilience, guaranteeing rights at work, and extending social protection. The creation of decent work opportunities is fundamental to sustainable urban development. The way urban labour markets develop is in turn central to whether job creation yields decent poverty-reducing employment.
G20 Labour and Employment Ministerial Declaration (2021)	Aimed to foster an inclusive, sustainable, and resilient recovery of labour markets and societies as well as combat inequality in employment between women and men in rural areas, where it is even more pronounced than in urban areas.
Education 2030 Incheon Framework for Action Implementation of SDG4 (2016)	This policy has vision is to transform lives through education, recognising the important role of education as a main driver of development which strongly united on a compassing approach to ensure inclusive and equitable quality education for children, youth and adults, while promoting lifelong learning opportunities for all.

Aligning the 2030 agenda goals of sustainable development, Incheon Framework and ILO Decent Work Agenda has represented Global Framework for education and employment, G20 Labour an Employment Ministerial Declaration also support the latter aspect. All of that framework has accommodated inclusive development across the urban-rural continuum; however, urbanisation or urban and rural context are not in a big proportion. ILO Decent Work The 2030 Agenda for Sustainable Development underlined that a decent work agenda for urbanisation can make cities more productive, inclusive, and sustainable.

In the context of UN Entities, UNESCO has also published the Global Education Monitoring (GEM) Report annually in order to bolster up inclusive development especially in education. In 2019, the report highlighted migration, displacement, and education. In addition, GEM Report 2020 and 2021 were more focused on addressing inclusive education for all. It was identified that the report underlined the prevalence of inequality in education as the consequence of urban rural continuum, in which migration is one of the issues that must be raised. In 2021, UNESCO has also produced the Sub-Education Policy Review Report for four AMS. Brunei Darussalam, Indonesia, Malaysia, and the Philippines. The report has considered Technical and Vocational Education and Training (TVET) as the panacea for economic development and unemployment reduction.

3.1.1.3. Health

Table 3.2. Global Frameworks on Public Health Issues

Global Framework	Framework Review
Global Patient Safety Action Plan 2021-2030	The 72 nd World Health Assembly in 2019 adopted resolution WHA72.6 on global action on patient safety and mandated the development of a global patient safety action plan. The 74 th World Health assembly adopted this global action plan in 2021 based on the vision of “no one harmed in health care”.
WHO Global Strategic Directions for Nursing and Midwifery 2021-2025	WHO’s SDNM 2021-2025 is a set of policy priorities for nursing and midwifery. The SDNM comprises four focus areas: education, jobs, leadership, and service delivery. Each area has between two and four policy priorities that could help a country to advance along the “strategic direction”.
WHO Global Strategy on Health, Environment and Climate Change: The transformation needed to improve lives and wellbeing sustainably through healthy environments (2020)	A new global strategy on health, environment and climate change has been developed by countries involved in the 72 nd World Health Assembly on May 2019. It aims at transforming the way we tackle environmental risks in relation to health by mainstreaming health aspects in all policies and scaling up disease prevention and health promotion.
Southeast Asia Regional Action Plan on Programmatic Management of Latent Tuberculosis Infection (2019)	WHO Regional Office for South-East Asia has developed this Regional Action Plan for the Programmatic Management of Latent TB Infection (LTBI) in consultation with stakeholders including civil society, community partners, and technical experts. The plan is in line with WHO’s updated and consolidated LTBI treatment guidelines of 2018.
Quality of Care for Maternal and New-born Health: A Monitoring Framework for Network Countries (2019)	The Monitoring Framework aligns with the Network’s goals, strategic objectives, implementation framework, and WHO standards for improving maternal and new-born care in health facilities. Its aim is to reduce deaths and stillbirths in participating health facilities by 50% over five years.
Promoting a Rights-based Approach to Migration, Health, and HIV and AIDS: A Framework for Action (ILO, 2017)	The report argues that conditions for migrants and refugees are complex and can be further improved through a human rights-based approach towards migration governance. It proposes a framework for action to help governments, employers and workers to apply such principles.
WHO Global Coordination Mechanism on the Prevention and Control of Noncommunicable Diseases (2016-2017)	NCDs, or noncommunicable diseases, commonly referred to four broad categories of chronic diseases – cardiovascular diseases, cancers, chronic respiratory diseases and diabetes.

Global Framework	Framework Review
Climate Services for Health: Improving Public Health Decision-making in a New Climate (WHO, 2016)	Climate Services for Health is a guide to support the development of a more effective solution-focused services for health. It has six fundamental components derived from the critical analysis of a wealth of global experiences, build an adequate enabling environment, guarantee sufficient capacity, compile and conduct necessary research, apply context-suited service application, and establish solid evaluation mechanisms.
Regional Framework on Health in All Policies for South-east Asia (2014)	The Regional Framework on Health in All Policies (HiAP) was developed through expert and regional consultation meetings. WHO has been requested to provide technical assistance to operationalise implementation.
Health in All Policies (HiAP) Framework for Country Action (WHO, 2014)	Health in All Policies (HiAP) is an approach to public policies that systematically consider the health implications of decisions. HiAP reflects the principles of legitimacy, accountability, transparency and access to information. It can be easily adapted for use in different country contexts and at the regional and global levels.
Noncommunicable Diseases Global Monitoring Framework (WHO, 2014)	The Global Monitoring Framework included a set of indicators capable of application across regions and country settings to monitor trends and assess progress made in implementing national strategies and plans on noncommunicable diseases.

3.1.1.4. Gender Equality and Social Inclusion

In the international context, several frameworks are used to define discrimination against vulnerable groups. They establish AMS' national plans in abolishing such discrimination and put the ideal of inclusive development into practice (Table 3.3). Some of these frameworks have been adopted by most AMS. While the remaining others have encouraged stakeholders to address social exclusion, especially within the urbanisation process.

Table 3.3. Global Frameworks of Vulnerable Groups Protection

Vulnerable Group(s)	Frameworks
Women	Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (1979), and its Optional Protocol (1999)
	Beijing Declaration and Platform for Action (1995)
	Gender Equality and the New Urban Agenda (UN Women, 2021)
Children	Convention on the Rights of the Child (CRC) (1989)
	Shaping Urbanisation for Children (UNICEF, 2018)
PWDs	Convention on the Rights of Persons with Disabilities (CRPD) and its Optional Protocol
	The Charter on Inclusion of Persons with Disabilities in Humanitarian Action
Elderly	The Madrid International Plan of Action on Ageing and the Political Declaration (2002)

In protecting women, CEDAW establishes the foundation for achieving gender equality by assuring women's equal access to equal opportunities in political and public life. ASEAN Member States that have ratified or acceded the convention are legally obligated to implement its provisions. Meanwhile, other frameworks lay out a roadmap and acknowledged the critical role of women's rights in the urban development agenda.

CRC is a legally binding international agreement that establishes every child’s civil, political, economic, social, and cultural rights, regardless of ethnicity, religion, or abilities. The agreement obligates governments to provide children’s fundamental requirements and assist them in reaching their full potential. Meanwhile, the rest of the frameworks encourage all urban stakeholders to invest in child-responsive urban design, understanding that cities generate wealth and injustice.

CRPD is the most advanced international human rights document addressing the rights of PWDs. Its protocol empowers the CRPD Committee to receive and investigate individual complaints. Meanwhile, others symbolise a commitment to include PWDs in humanitarian action.

The Madrid Plan of Action provides a new agenda for dealing with the issue of ageing in the 21st century. It prioritises three areas: older people and development, promoting health and well-being into old age, and enabling and supporting surroundings. It is a policy-making resource that suggests strategies for governments, non-governmental organisations, and other actors to realign how their societies see, engage with, and care for their elderly population.

3.1.1.5. Environment

Sound planning in environmental management significantly impacts social and economic development. In line with the global trend of sustainability, ASEAN needs to have a significant role in bolstering sustainability and resilience. Several major international frameworks have identified the importance of disaster management and vital global agreements, these available frameworks are presented and further elaborated in the following table.

Table 3.4. Global Commitments on Environmental Management

Actions/Sectoral Plans/Strategies	Topics	Commitments
Climate Change to United Nations Climate Action Summit and COP26	Climate change mitigation and adaptation	<ul style="list-style-type: none"> • Strengthening ASEAN’s capabilities to prevent, mitigate, and manage climate-related disasters through existing mechanisms (AADMER, One ASEAN One Response, and other declarations or plans). • Promoting sustainable management of forests as well as enhancing biodiversity conservation, protection, and restoration. This will improve the environmental condition of rural areas which usually located near the forest and might help reduce climate change and air quality impact in urban areas. • Continuing to achieve substantial progress of the energy efficiency programme.
The Sendai Framework for Disaster Risk Reduction 2015-2030 (SFDDR)	Disaster risk reduction	<ul style="list-style-type: none"> • Strengthening disaster risk governance to manage disaster risk. • Understanding disaster risk. It is essential since urban-rural areas experience different types, magnitude, and frequency of the disaster. An inclusive and comprehensive study is needed. • Investing in disaster risk reduction for resilience. • Improving disaster preparedness for effective response and to recovery, rehabilitation, and reconstruction.

Actions/Sectoral Plans/Strategies	Topics	Commitments
Future We Want (Rio, 2012)	Energy, sustainable transport, sustainable cities and human settlement, disaster reduction, drought, climate change	<ul style="list-style-type: none"> • To achieve food security and nutrition and sustainable agriculture. • Improving energy efficiency, increasing the share of renewable energy and cleaner and energy-efficient technologies. • Increases access to environmentally sound, safe and affordable transportation. • Developing sustainable transport systems, including energy-efficient multimodal transport systems, clean fuels and vehicles, and improving transportation systems in rural areas. • Integrated planning and management approaches to achieve economically, socially and environmentally sustainable societies in the cities. • Including the poor in the decision making to create sustainable cities and urban settlements. • Protection and restoration of green and safe urban spaces. • Considering disaster risk reduction, resilience and climate risks in urban planning • Increasing the number of metropolitan regions, cities and towns implemented sustainable urban planning and design. • Stronger interlinkages among disaster risk reduction long-term development planning, disaster recovery, and prioritise for more comprehensive and coordinated strategies that link disaster risk reduction and climate change adaptation considerations into public and private investment.
Addis Ababa Action Agenda	Hunger and malnutrition among the urban poor	To address the challenges of financing and achieving an enabling environment at all levels of sustainability.
2030 Agenda for Sustainable Development	Water, energy, waste, and safe chemicals	To enhance sustainable and inclusive urbanisation and capacity for participatory waste, water, and energy management.
The Paris Agreement	Climate change	To limit global warming below 2, preferably 1.5 degrees compared to pre-industrial levels.

3.1.2. ASEAN

3.1.2.1. Urbanisation

In the regional level, sustainable urbanisation has also become a priority in line with the 2030 sustainable development goals. ASEAN has developed the ASEAN Sustainable Urbanisation Strategy (2018) to achieve a seamless and comprehensive connected and integrated ASEAN to promote competitiveness, inclusiveness, and a greater sense of community. Specifically on sustainable and smart cities, several documents have highlighted the importance of digital innovation and acceleration to digital connectivity particularly to increase the connectivity, facilitate smart city development in AMS, and mainstreaming smart technology into urban systems for sustainable urban development. These regulations are the Master Plan on Connectivity (MPAC) 2025, ASEAN Smart Cities Framework, and the Road to Sustainable Cities (2021).

To tackle the inequality and eradicate poverty in ASEAN, focusing merely on the urban side will not be enough. Through the ASEAN Framework Action Plan on Rural Development and Poverty Eradication 2016-2020, ASEAN has strived to strengthen the convergence of rural development and poverty eradication initiatives at the local, national, and regional levels. These were done through improved coordination mechanisms, policy coherence, and effective localisation of rural development and poverty eradication programmes as well as actions. In addition to that, the Initiative for ASEAN Integration (IAI) Work Plan IV 2021-2025 also focuses on strategic areas, one of which is food and agriculture, to support the development of the region's rural areas.

Furthermore, in responding to the COVID-19 pandemic, ASEAN has made an effort to address the crisis through strategies and implementation plan in the ASEAN Comprehensive Recovery Framework (ACRF) (2020). The documents and frameworks mentioned in this section are also aligned to the ASEAN Vision 2025 which further envisions all three aspects of the ASEAN Community, namely the Political-Security Pillar (ASPC), the Economic Community Pillar (AEC), and the Socio-Cultural Pillar (ASCC) for a rule-based, people-oriented, and people-centred ASEAN Community.

3.1.2.2. Education and Employment

ASEAN policies addresses a wide range of sectors in which all of them are based on the three core ASEAN pillars. The pillars comprised of ASEAN Political-Security Community, ASEAN Economic Community and ASEAN Socio-Cultural Community. The latter pillar harbours issues of education and employment. In the context urban and rural continuum, ASEAN Socio-Cultural Community (ASCC) Blueprint (2025) has accommodated integrated approaches in urban planning and management for sustainable urbanisation, the strategic measures that framed including strengthen positive economic, social and environmental linkages among urban, peri-urban and rural areas; as well as strengthen policies and strategies for the effective impact management of population growth and migration on cities. Despite ASCC as fundamental policy, the following table are some lists and policy review specify on Education and Employment and its correlation with the study objectives.

Table 3.5. ASEAN Policy in Education and Employment

ASEAN Policy	Policy Review pertaining to Urban and Rural Context
ASEAN Socio-Cultural Community (ASCC) Blueprint (2025)	Align with the study objectives regard to moving towards inclusive development, ASCC fundamental principle also has pertained strategic measures for education and employment such as provide greater access to basic social services such as education including early childhood and vocational education, as well as promote human capital development and economic self-reliance through employment opportunities, entrepreneurship and microfinance. Each scope is under inclusive, sustainable and dynamic community principle with regard to equitable access to opportunities, decent work, education and information. This policy also provides some strategic measures for sustainable urbanisations.
ASEAN Work Plan on Education 2016 – 2020	This work plan in line with the study objectives regard to moving towards inclusive development especially on education, portray through its eight main goals, one of which enhance the quality and access to basic education for all, including the disabled, less advantageous & other vulnerable groups. However, the policy hasn't incorporated urbanisation context into the work plan.

ASEAN Policy	Policy Review pertaining to Urban and Rural Context
ASEAN Declaration on Strengthening Education for Out of School Children and Youth (OOCYSY) 2016	The declaration has supported inclusive development on education by agreed on the dimensions of OOCYSY to encompass children and youth through ensures the implementation of key principles, including inclusivity, equity, and sustainability. The declaration also encouraged AMS to further provides measures in establishing programmes and practices while ensuring inclusive and equitable quality education promotes lifelong opportunities for all. Unfortunately, this declaration precisely only pinpoint OOCYSY and not accommodated urban and rural context.
ASEAN Strategic Plan for Culture and Arts 2016-2025	This strategic plan has five priorities areas of action in education, one of priorities area of action also related with study objective in fostering inclusive development, such as promote ASEAN as a centre for human resource development and training for cultural and creative sectors by facilitating the linkage of educational institutions. This policy is not mainstreaming urbanisation, however this policy also stated that will support ASEAN-related studies on themes such as diasporas, cosmopolitanism in urbanisation and regional integration.
ASEAN Labour Ministers (ALM) Work Programme 2021-2025 and Work Plans of The Subsidiary Bodies	This work programme consists of eight thematic areas and 32 project titles. In terms of urban and rural continuum, this work programme mostly focusses on rural development through promoting inclusive employment including for rural employment, unemployed youth, persons with disabilities, and other vulnerable workers through employment support services, skills matching, and entrepreneurship/SMEs. In addition, this work programme also supports in addressing challenges pertaining to TVET governance, particularly with respect to participation rates, access to formal and non-formal TVET especially in rural areas.
ASEAN Labour Ministers' Statement on The Future of Work: Embracing Technology for Inclusive and Sustainable Growth	This policy has nine strategies which aims to build an ASEAN workforce with enhanced competitiveness and engaged in safe and decent work derived from productive employment, and adequate social protection. Two of which those strategies also formed to address issues in inclusive development. Unfortunately, this policy was not mention urban and rural continuum context.
ASEAN Declaration on Promoting Green Job for Equity and Inclusive Growth of ASEAN Community	This declaration has general purposes to increase diversities on green products and green services among AMS to contribute towards sustaining/conserving the environment. While advocating the importance of environmentally and socially sustainable economies with the objective of job creation, this declaration has nine principal policies, one of which to achieve inclusiveness as study objective stated. The policy also has correlated it with urbanisation through emphasising on occupational safety and health, skills for green jobs, the importance of green jobs in urbanisation.
ASEAN Declaration on Human Resources Development for the Changing World of Work and Its Roadmap	The declaration supports one of the critical purposes of ASEAN, as stipulated in the ASEAN Charter, which is to develop human resources through closer cooperation in education and lifelong learning, and in science and technology, to strengthen the ASEAN Community. This policy also suggested to undertake some actions in regard to urban rural continuum, one of which Improve the inclusivity of education and employment for all especially with respect to improving access to and quality of skills training and job opportunities for all, especially women, people with disabilities, elderly, those in rural or remote areas and those employed in SMEs.

As responsive action to the adverse impacts of the COVID-19 pandemic on education and employment, ASEAN has anticipated it quickly by producing policy that require resilience and adaptability, such as ASEAN Declaration on Human Resources Development for the Changing World of Work and Its Roadmap. ASEAN also already take into account environment aspect and sustainability into some policies such as ASEAN Declaration on Promoting Green Job for Equity and Inclusive Growth of ASEAN Community, and etc. Most of the policies also have

accommodated and incorporated inclusive development as one of the priority of actions even programmes. However, in the context urban and rural continuum, some policies neither accommodated nor incorporated urbanisations into the policies comprised of ASEAN Work Plan on Education 2016 – 2020, ASEAN Declaration on Strengthening Education for Out of School Children and Youth (OOCYSY) 2016, and ASEAN Labour Ministers’ Statement on The Future of Work: Embracing Technology for Inclusive and Sustainable Growth. Meanwhile, some policies have supported urbanisation as part of the goals or general context, such as ASEAN Socio-Cultural Community (ASCC) Blueprint (2025), and etc. Other policies also have addressed issues in rural areas such as ASEAN Labour Ministers (ALM) Work Programme 2021-2025 and Work Plans of The Subsidiary Bodies, and ASEAN Declaration on Human Resources Development for the Changing World of Work and Its Roadmap by fostering inclusive development whether in education and employment sectors.

3.1.2.3. Health

Table 3.6. ASEAN Policy on Public Health Issues

ASEAN Policy	Policy Review
ASEAN Strategic Framework to Combat Antimicrobial Resistance through One Health Approach (2019-2030)	The strategic framework aims to formulate and implement an ASEAN regional action plan adopting the One Health Approach in combating AMR through the comprehensive multisectoral and multidisciplinary engagement and participation of all governments and stakeholders. The framework has six strategic objectives, including strengthening education and public awareness of AMR. It aims to formulate and implement a regional action plan adopting the One Health approach. This strategic framework has six strategic objectives.
Regional Strategic and Action Plan for ASEAN Vaccine Security and Self-Reliance (AVSSR) 2021-2025	The Regional Strategic and Action Plan for AVSSR 2021-2025 aims to ensure healthy ASEAN through timely, equitable access to affordable and quality-assured vaccines. It aims to describe the most current capacities, gaps/ challenges concerning the whole vaccine value chain. The document includes five strategies and expected outputs drawing from the analysis of the analysis.
ASEAN Strategic Framework for Public Health Emergencies (2020)	The ASEAN Strategic Framework for Disaster Management and Emergency Response has been launched. Its operationalisation will also consider the role of women and special populations like migrant workers, indigenous people, people with disabilities in nation-building.
ASEAN Post-2025 Health Development Agenda (2021-2025)	ASEAN Post-2025 Health Development Agenda aims to promote a healthy and caring ASEAN Community. The agenda includes promoting a healthy lifestyle, universal access to quality health care and financial risk protection, safe food and healthy diet, and sustainable as well as inclusive development where health is incorporated in all policies. In order to succeed in the new health agenda, clustering, goal setting and lists of health priorities were applied to the ASEAN Health Cooperation.

3.1.2.4. Gender Equality and Social Inclusion

Based on primary and secondary data, principally, all AMS have adopted international conventions of CEDAW, CRC and CRPD. These conventions were also adopted in related ASEAN regional, which further strengthened the importance of AMS to incorporate both the international and regional policies into policies and programmes in their countries e.g., SDGs that mandated “no one left behind” in all aspects of development. Particularly those that are directly related to this study, which are education, employment, and environment, especially in the context of urbanisation.

To ensure that the policies are adequately implemented, it requires three stages of policy adoption i.e., organisational process, institutional policies or programmes, and implementation of the policies and programmes in AMS.

Adoption of the principles of inclusiveness in organisational process

Based on the documentary study and FGDs data, all AMS have adopted the principle of inclusiveness in its organisational processes, particularly concerning development. This includes international conventions such as CEDAW, CRC, and CRPD as well as related ASEAN policy frameworks that have been adopted by all AMS through ratifications adopted through their national laws.

Institutional policies or programmes on inclusiveness

National laws that incorporate inclusiveness and anti-discrimination principles as stipulated in the aforementioned international conventions and regional policies are further elaborated into institutional programmes on inclusiveness in education, employment, and environment, described in detailed within section 3.3.4, which covers description and analysis of ten AMS.

Implementation of policies and programmes on inclusiveness

While the principle of inclusiveness and the spirit of anti-discrimination are widely adopted in national laws and institutional policies or programmes in all AMS, its implementation varies. Some countries have more advanced implementation practices. For example, gender mainstreaming that accommodates PWDs' special needs in their policies and programmes, while other countries are still left behind. Discrimination against women and PWDs remains a problem due to deeply rooted social and cultural norms that place women and PWD as secondary citizens.

Solving the cross-sectoral issues such as poverty, education, employment, and health becomes a challenge due to the highly sectoral policy-making structures which make it difficult to implement inclusive and anti-discrimination properly. The following are two documents which highlights the aforementioned cross-sectoral issues that impact vulnerable groups:

1. ASEAN Development Outlook (ADO) 2021

The aims of the ADO report are threefold: (1) Trace progress toward inclusive and sustainable development in the AMS; (2) highlight important obstacles and best practices; and (3) deliver results of critical analysis on lessons learned for future policy planning and programming. The report aims to achieve three main research objectives: (1) Assess ASEAN 's development goals and outcomes against anticipated future challenges to identify gaps or shortfalls; (2) evaluate progress and highlight best practices and ways to accelerate such gains across the region; and (3) make policy recommendations to advance progress against existing goals and propose new ones where applicable.

As a continuation of Theme 3, Theme 4: Social Welfare and Health examines the themes of livelihoods and workplace protection that intersect with social protection, physical and mental health, access to public services, and time usage. The ADO investigates the social circumstances of people within in ASEAN Region affects human health, and our vulnerability to illnesses. The availability of high-quality public services is viewed as a strategy to reduce poverty and increase inclusion as well as well-being.

2. ASEAN Gender Outlook 2021

ASEAN Gender Outlook highlights the scarcity of gender data and advocates for increased investment and prioritisation of data for tracking progress toward gender equality and achievement of the Sustainable Development Goals (SDGs) in AMS. The report highlighted the various criteria which applies to the most deprived group of women and girls, which are varied across AMS. However, most of the criteria emphasise on the socio-economic situation (including working environment, unemployment rate, etc.), educational attainment, public health facilities, and being part of ethnic minorities; with the most deprived group of women and girls were identified in the poorest rural areas and the least deprived ones in richest urban areas in AMS (ASEAN, 2021b, p. 11).

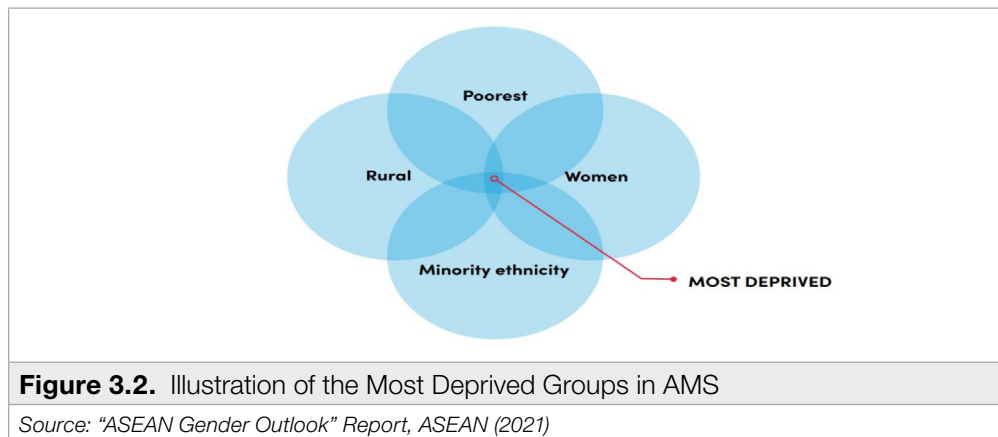


Figure 3.2. Illustration of the Most Deprived Groups in AMS

Source: "ASEAN Gender Outlook" Report, ASEAN (2021)

3.1.2.5. Environment

To adapt to the current environmental condition and cope with existing challenges and barriers, ASEAN has adopted several plans, strategies, and policies to support formulation of policies at the national level. Among various existing documents signifying ASEAN cooperation in climate change along with its impact to the magnitude and frequency of environmental disasters, ASEAN Socio-Cultural Community (ASCC) Blueprint 2025 acted as a culmination of all regional climate change ambitions (ASEAN, 2021). The ASCC Blueprint promotes a collective understanding on climate change in ASEAN and supported the development of the ASEAN Climate Change Initiative (ACCI). The following section further elaborate on these documents as well as other relevant documents:

1. ASEAN Socio-Cultural Community (ASCC) Blueprint 2025

The ASCC Blueprint promotes a common understanding of ASEAN's climate change and provides an advisory platform to strengthen regional cooperation on climate change. The ASCC aims to achieve the environmental sustainability in the face of social changes and economic development. This document elaborates on key result areas and corresponding strategic measures corresponding to vulnerabilities, including disasters, climate change, greenhouse gas, and loss of biodiversity. However, contents of this document did not comprehensively address linkages between sustainable and resilience with urban-rural continuum.

For example, strategic measures on Conservation and Sustainable Management of Biodiversity and Natural Resources can be developed to maintain green spaces and forest in the context of rural areas. Controlled urban expansion and land use

can also impact ecosystem services and biodiversity, increasing communities' exposure to disaster and climate change. This document also generally discusses urbanisation and urban-rural continuum in the Environmentally Sustainable Cities 'result area'. Two strategic measures in the document are most relevant: Strategic measure i "Enhance participatory and integrated approaches in urban planning and management for sustainable urbanisation towards a clean and green ASEAN; and strategic measure v "Strengthen positive economic, social and environmental linkages among urban, peri-urban and rural areas". This document identified that these result areas can be developed into a more detailed strategy regarding urban-rural continuum.

2. ASEAN Strategic Plan on Environment (ASPEN)

ASEAN Strategic Plan on Environment (ASPEN) is being developed to act as a comprehensive guide of ASEAN cooperation on the environment and support AMS towards its 2025 vision: Forging Ahead Together Roadmap. ASPEN consists of seven strategic priorities that cover major thematic areas of cooperation in environmental protection and sustainable development: 1) Nature conservation and biodiversity; 2) Coastal and marine environment; 3) Water resources management; 4) Environmentally sustainable cities; 5) Climate change; 6) Chemicals and waste; 7) Environmental education and sustainable consumption and production.

3. ASEAN Working Group on Climate Change (AWGCC) Action Plan

The AWGCC Action Plan is a living document that tracks the ongoing and proposed ASEAN Climate Change Cooperation Projects. These projects fall under one of eight core themes: (i) climate change adaptation and resilience; (ii) long-term planning and assessment of National Disaster Council (NDC); (iii) climate change mitigation; (iv) climate modelling and assessment; (v) measurement, reporting and verification and stocktake of GHG emissions; (vi) climate financing and market; (viii) cross-sectoral coordination; and (viii) technology transfer. ASEAN Member States are committed to working towards a climate-resilient ASEAN through the implementation of the Action Plan.

4. ASEAN Disaster Resilience Outlook: Preparing for a Future Beyond 2025

One of the most relevant strategic frameworks provided through this document is strategy number 5: strengthening cross-sectoral synergies and inter-regional cooperation, diversify finance mechanisms, and support the development of sub-national disaster management actors including the provincial, city and community levels. In addition, this document also addresses urban and rural disaster resilience. The ASEAN Environmentally Sustainable Cities (ESC) working group has facilitated the High-Level Seminar on Sustainable Cities and the ASEAN ESC Model Cities Programme. These programmes act as regional platforms to localise SDGs and facilitate knowledge sharing between cities in ASEAN.

5. ASEAN Smart Cities Framework

The ASEAN Smart Cities Network was established in April 2018, as an initiative by Singapore during its ASEAN Chairmanship. The ASEAN Smart Cities Framework already includes environmental aspect as one of the developmental focus areas. ASEAN is pursuing: (1) clean environment; (2) resource access and

management; and (3) urban resilience. Corresponding specifically to the third objective, this document further explores the concept of smart cities, which intends to develop cities by incorporating sustainable and resilient agenda using science-based green technology and energy as well as promote sustainable consumption and production through innovative policies. It is important to highlight that this framework have not explicitly acknowledges urbanisation and urban-rural within the context of environmental sustainability. Urbanisation and urban-rural linkages were generally discussed in the context of economics or policy and regulatory frameworks.

3.2. Relevant Main Coordination Government Mechanisms in AMS (Planning, Horizontal Coordination Nationally, Vertical Coordination)

This section discusses relevant main coordination mechanisms utilised by ASEAN Member States' government bodies. Acknowledging these mechanisms, this section includes discussions on the planning processes, horizontal coordination at the national level, and vertical coordination.

3.2.1. Urbanisation

Within the AMS, there is no policy explicitly regulating urbanisation. However, AMS policies are issued to respond to urbanisation and to overcome or minimise rapid urbanisation as well as minimise risks associated with development and its negative impacts. These policies often correspond to the development of rural areas or economic growth in the rural areas, basic infrastructures, and services provision, as well as the improvement of slums. Several policies or documents regarding urban and rural development are as follows:

1. Policy Framework 2018-2023, Ministry of Development Brunei Darussalam

Key policies were identified in the Policy Framework 2018-2023, covering land use, housing, roads, water, drainage, sanitation, environment, construction industry, and infrastructure financing. Each policy comprises of goals and thematic tracks to ensure effective implementation of the objectives of ministries in each AMS. This policy framework aims to enhance collaborations among Brunei Darussalam's government departments towards a 'one Ministry of Development approach'. This framework does not solely focus on the development of the urban areas but also the rural areas. Emphasis on both urban and rural were shown particularly under the policy covering land use, particularly by ensuring sustainable land use through enhancing compliance of development plans including reviewing policies and legislations related to urban and rural planning.

2. Strategic Plan 2018-2023, Ministry of Development Brunei Darussalam

The strategic plan focuses on six areas to achieve quality living, sustainable development, and the vision of a prosperous nation. These focus areas will lead to achieving four goals, namely:

1. Ensuring high accessibility of quality and reliable public infrastructure and services
2. Enabling affordability for infrastructure and services that support the inclusive development initiatives

3. Optimisation of resources and assets primarily through their efforts for integrated and sustainable development
4. Effectively implement public-private partnership (PPP) to facilitate investment for vibrant economic growth.

3. Rural Development Policy 2018-2023 and Rural Development Policy 2021-2030, Ministry of Rural Development Cambodia

Through Cambodia's Rural Development Policy 2018-2023, the Ministry of Rural Development Cambodia designed four programmes contributing to rural poverty eradication, which are: 1) develop physical infrastructure and transportation, 2) improve living conditions in a rural community, 3) diversify rural economic activities, and 4) strengthen administrative support and general affairs. However, due to the COVID-19 pandemic, the government has developed a new policy, Rural Development Policy 2021-2030. The policy's goal is to transform rural Cambodia into a rural community by 2030.

The new policy is expected to assist Cambodia's economic recovery. The two key policy targets rolled out in this document are: 1) promoting the social well-being of rural Cambodia, and 2) ensuring rural health care of Cambodia. To achieve these targets, the policy comprises of five programmes, including 1) Rural economic development, 2) Healthy development and improving rural living conditions, 3) Community development, 4) Physical infrastructure and rural transport, and 5) Policy development and strengthening governance.

4. Undang-undang No. 6 Tahun 2014 tentang Desa (Indonesia's Village Law)

To stimulate rural development and reduce poverty in rural areas, the Government of Indonesia enacted a Village law No.6/2014. The Village Law adopts the principles of good governance, comprising community involvement, transparency, accountability, and the provision of financial resources and village autonomy. Village Law is the pioneer of community-driven development led by the village government with the Village Fund as an instrument.

5. Peraturan Menteri Desa, Pembangunan Daerah Tertinggal, dan Transmigrasi Republik Indonesia No. 7 Tahun 2021 tentang Prioritas Penggunaan Dana Desa Tahun 2022 (Village Fund Priority Utilisation)

Through this ministerial regulation, the Indonesian government emphasises efforts aimed at handling the COVID-19 pandemic and its impacts towards villages through this policy. The efforts aim to strengthen the adaptation of new habits and national economic recovery in accordance with authorities of villages. The regulation outlines three key priorities which governs the utilisation of village funds:

1. National economic recovery according to village authority.
2. National priority programmes according to village authority.
3. Mitigation and handling of natural and non-natural disasters according to village authority.

6. 12th Malaysia Plan 2021-2025

Three themes that were carried out through this plan are 1) resetting the economy; 2) strengthening security, well-being and inclusivity; 3) advancing sustainability. These themes were supported by four policy enablers which focus on developing future talents,

accelerating technology adoption and innovation, enhancing connectivity & transport infrastructure, and strengthening public service. Efforts to narrow the gap between rural and urban areas for greater inclusion is highlighted under theme two by addressing poverty holistically and uplifting the livelihood of *Orang Asli* and *Rakyat*.

7. Myanmar Sustainable Development Plan 2018-2030

Cross-cutting themes include equity and inclusion, sustainability in all forms, conflict-sensitive approaches, and democratic principles. The plan was structured around three pillars, five goals, 28 strategies, and 251 action plans aligned with the SDGs. Strategy 5.6: “Manage cities, towns, historical and cultural centres efficiently and sustainably” addressed the social and economic impacts arising from greater urbanisation to prevent imbalances from reaching destabilising levels. While strategies under Goal 3: “Job creation & private sector-led growth” address the development and poverty reduction in rural areas.

8. Thailand National Strategy 2018-2037

Thailand National Strategy 2018-2037 is the country’s first national long-term strategy aimed to achieve: “A Secure Nation, Contented People, Continued Economic Growth, an Equal Society, and Sustainable Natural Resources”. The six strategies comprising the national strategy are:

1. National Strategy on Security
2. National Strategy on Competitiveness Enhancement
3. National Strategy on Developing and Strengthening Human Capital
4. National Strategy on Social Cohesion and Equity
5. National Strategy on Eco-Friendly Development and Growth
6. National Strategy on Public Sector Rebalancing and Development

Agriculture is one of its main focuses as the policy considers that food security is one of the critical issues that need to be given importance. It seeks to make agriculture, forestry and fisheries more productive and sustainable. Moreover, it also seeks to reduce poverty and inequality dilemma in Thailand.

9. Viet Nam Decree No. 210/2013/ND-CP on Incentive Policies for Enterprises Investing in Agriculture and Rural Areas

Through this decree, the government of Viet Nam provides incentives and support for enterprises investing in agriculture and rural areas. The document also lists agricultural sub-sectors eligible for special investment incentives. The incentives specified in this decree are listed under Chapter II Land incentives, including land use levy exemption and reduction, land and water surface rent exemption and deduction, as well as land and water surface rent support for households and individuals. In addition to the incentives, the government also supports human resource training, market development, as well as science and technology application.

10. Viet Nam National Action Plan for the Implementation of the 2030 Sustainable Development

Corresponding to the global SDGs, the National Action Plan for implementing the 2030 Sustainable development was issued by the government of Viet Nam. This plan comprises 115 specific targets. Two phases of the implementation period (2017-2020 and 2021-2030) were set with specific key tasks. The implementation of specific targets

and tasks were assigned to specific ministries. Thus, coordination in the achievement of the goals and targets are essential.

In the document, Viet Nam has several goals which will support the development of urban-rural continuum and linkages and urbanisation process and its impact in the country, including Goal 1 (End all forms of poverty everywhere), Goal 2 (Eliminate hunger, ensure food security, improve nutrition and promote sustainable agricultural development), Goal 8 (Ensure sustainable, comprehensive and continuous economic growth; and generate full, productive and decent employment for all citizens), Goal 9 (Develop a highly resilient infrastructure; promote inclusive and sustainable industrialization; and promote renovation), and Goal 11 (Promote sustainable, resilient urban and rural development; ensure safe living and working environments; ensure a reasonable distribution of population and workforce by region). These goals, supported by their targets, are not only focusing on the urban development, but also trying to accelerate the development of the country’s rural areas, to balance both urban and rural development.

3.2.2. Education and Employment

A. Education

The National Policy on Education were issued to regulate education systems covering all education levels including specifically in rural and urban areas. Several ASEAN Member States have issued their domestic education policy, except Viet Nam and the Philippines, which are currently developing their education sector plans. Further review of National Policy on education are presented in the following table.

Table 3.7. National Policy for Education in AMS

National Policy on Education	Policy Review
Brunei Darussalam: The Ministry of Education Strategic Plan 2018-2022	This strategic plan sets out the vision “Quality Education, Dynamic Nation” and the mission “To deliver holistic education to achieve the fullest potential for all” intended to be implemented for the long-term through three strategic objectives. The three strategic objectives include (i) Transforming organisation human resources towards a performance-driven culture, (ii) Providing equal and equitable access to quality education, (iii) Enhancing shared accountability with stakeholders in the development of teaching and learning.
Cambodia: Education Strategic Plan 2019-2023	The Education Strategic Plan 2019-2023 was designed to implement education, youth and sports reforms and establish a robust education base for 2030 and beyond. It corresponds with Cambodia’s socio-economic development vision and the reform programmes of the Royal Government of Cambodia. This strategic plan is implemented by Cambodia’s Ministry of Education, Youth, and Sport.

National Policy on Education	Policy Review
Lao PDR: Education and Sports Sector Development Plan 2021-2025	The Education and Sports Sector Development Plan 2021-2025 guides government agencies at all levels and development partners in their joint efforts to achieve the National Development Goals of the government and achieving the implementation of education-related programmes and activities that can ensure education quality based on the mandates, roles and responsibility of each level. This development plan refocuses on primary education to improve teaching and learning; expansion of lower secondary to be more affordable and realistic; realign the skills and competencies of MoES staff; provide institutional strengthening to the PESS, DESB, clusters and schools; and to enhance learning outcomes and reduce disparities, particularly across the 40 most disadvantaged districts.
Malaysia: Education Blueprint 2013-2025 (Preschool to Post-Secondary Education)	The Malaysia Education Blueprint 2013-2025 has set clear targets that need to be achieved in terms of quality, equity and access within 13 years. Meticulous planning within this duration is essential to include the transformation of human resource management and finance as well as the designation of critical initiatives affecting students' outcomes. The priority of the Ministry is to ensure better alignment between policy formulation and implementation along the entire education value chain. A clear understanding of this Blueprint among the Ministry's personnel and teachers is essential to ensure the programmes implemented will achieve the desired targets.
Myanmar: National Education Strategic Plan 2016-2021	The Myanmar National Education Strategic Plan 2016-2021 aims to improve teaching and learning, vocational education and training, research and innovation, aimed to create measurable improvements in student achievement in all schools and educational institutions. The three main reasons for this goal are as follows, (a) High expectation from parents and students, (b) Teachers have a pivotal role to play in the implementation of National Education Strategic Plan Reform, (c) TVET and higher education are fundamental for Myanmar's long-term social and economic development. The Myanmar National Education Strategic Plan 2016-2021 provides the government, education stakeholders, and citizens with a 'roadmap' for sector-wide education reforms over the next five years that will dramatically improve access to quality education for students at all levels of the national education system.
Indonesia: Ministry of Education and Culture Strategic Plan 2020-- 2024	Indonesia's Ministry of Education and Culture Strategic Plan 2020-- 2024 presents policies and strategies to support the achievement of the Nine Priority Development Agendas (NAWACITA). The free-learning policy also aspires to provide high-quality education for all Indonesian people, characterised by high enrolment rates at all levels of education, quality learning outcomes, and equitable quality education, whether geographically or socio-economically. The focus of education and cultural development is directed at strengthening the nation's culture and character through improvements on education policies, procedures, and funding, as well as developing awareness of the importance of preserving the noble values of national culture and absorbing new values from the global culture positively and productively.

National Policy on Education	Policy Review
Thailand: The National Scheme of Education (2017-- 2036)	Thailand's National Scheme of Education aims to provide quality education, engage in lifelong learning, and live happy lives based on a sufficiency economy and global changes in the 21 st century. This policy covers four objectives; (i) to develop a quality and effective educational system and process; (ii) to produce quality Thai citizens with qualifications, skills, and capabilities as required by the Constitution of the Kingdom of Thailand, the National Education Act, and the National Strategic Framework; (iii) to establish Thailand as a society of high-quality learning, morals, and ethics as well as national harmony and cooperation for sustainable development on the principle of the sufficiency economy; and (iv) to free Thailand from the middle-income gap and income inequality.

As a fundamental component of planning, National Policy on education has guided coordination among National and Local Governments, especially the Ministry of Education. However, those national policies were designed to address specific issues on education such as quality, inequality, and accessibility. Direct correlation between these policies and the urbanisation process was not written. However, one of the issues such as equitable quality of education, has brought the understanding that the distribution of education infrastructure might be uneven, including in urban and rural areas.

B. Employment

National policy in employment in ASEAN showed different adverse priority and focuses due to significant issues might face by each country. Primarily the policy aims to enhance capability in the field of labour, protecting worker and providing equitable opportunities. In its correlation with urbanisation context, despite employment take role as main factors, urbanisation also affected structural transformation of economy. The tendency to work in industry and services sector in urban areas has made labour in agricultural sector in rural areas being decreased. Even though, somehow, other issues of labour sector in urban areas may arising such as lack of decent job. To anticipate this, ILO cooperate with several AMS to accomplished decent work agenda which incorporated into AMS National Policy. Some AMS also began to develop their rural areas to diminishing the gap between urban and rural in various aspect, for example, In Brunei Darussalam through Bandar Seri Begawan Smart City Action Plan (ASCN Pilot Cities), Brunei Government revitalized Kampung Ayer (Water Village), which have three strategic targets by improving access to community services or high quality of life, increasing economic and entrepreneurial competitiveness, and enhance environmental sustainability through maintaining the quality of the local environment. For further detail, Table 3.8 below showed some National Policy in AMS pertaining to employment.

Table 3.8. National Policy for Employment in AMS

National Policy for Employment	Policy Review
Kingdom of Cambodia Decent Work Country Programme 2019-2023	In collaboration with the ILO, The Royal Government of Cambodia affirmed its commitment to implementing the Decent Work Country Programme (DWCP). DWCP focuses on ensuring the rights, inclusion and engagement of women, men, youth and vulnerable groups in line with international labour standards. The DWCP prioritises efforts, resources and partnerships in three core areas, including (a) promoting decent jobs and sustainable enterprises linked to formalisation and skills development, (b) strengthening and expanding social protection and (c) improving industrial relations and rights at work.

National Policy for Employment	Policy Review
Indonesia Ministry of Manpower Strategic Plan 2020-2024	This strategic plan comprises of vision, mission, overview, policy, programme, indicator and target of The Ministry of Manpower tasked to carry out government affairs in the field of manpower. The main target of this strategic plan aims to improve quality and competitive Human Resources (HR). The Indonesian Long-Term Development Plan (RPJPN) places human resources as the principal capital for national development towards inclusive and equitable development throughout Indonesia.
Lao PDR Decent Work Country Programme (DWCP) 2017-2021	A five-year framework for cooperation between the International Labour Organisation (ILO) and Lao PDR Government and employers' and workers' organisations. The DWCP targets' strategic areas will support Lao PDR in addressing its decent work challenges while taking advantage of opportunities available through developments such as ASEAN integration and the demographic dividend. The major strategic deliverables of the programme between 2017 and 2021 will include the development and initial implementation of national strategies for rural employment and social protection.
Myanmar Decent Work Country Programme 2018-2022	The Government of the Republic of the Union of Myanmar affirmed to commit working with the ILO to promote and advance decent work in Myanmar. The Myanmar Decent Work Country Programme has three priority areas, comprised of (i) Employment, decent work, and sustainable entrepreneurship opportunities are available and accessible to all, including vulnerable populations affected by conflict and disaster, (ii) Application of the Fundamental Principles and Rights at work is strengthened through improved labour market governance, (iii) Social protection coverage for all is progressively extended, especially for vulnerable workers and populations.
Malaysia Decent Work Country Programme 2019–2025	The Government of Malaysia promotes decent work for sustainable development through two phases; Phase 1 (2019-2020) & Phase 2 (2021-2025). The overarching goals of this policy is to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. This policy highlights three country priorities in work; (i) Rights at work – Protecting and promoting rights at work, (ii) Future of work – Strengthening national capacities to meet the needs of current and future of work, (iii) Labour migration – Strengthening labour migration governance. Interrelating with urban-rural migration, the third priority has proven that the rights of people who do labour migration are also considered by the government.
Thailand Decent Work Country Programme 2019-2025	National constituents will continue to work together to strengthen local ownership of DWCP initiatives and outcomes and ensure long-term sustainability and impact. Decent Work Country Programme for Thailand 2019-2021 sets out the following three Country Priorities, including (i) promote an enabling environment for the growth of decent and productive employment, (ii) strengthen labour protection, especially vulnerable workers, (iii) strengthen labour market governance in line with international labour standards.
The Philippines Decent Work Country Programme 2019-2025	As the integrated strategic roadmap for national stakeholders and international partners to support labour and employment goals, the DWCP 2020–2024 focuses on some priorities, including sustainable work and employment opportunities, improved labour market governance and equitable social protection. Integrated into each of these priorities are the cross-cutting themes of <i>tripartism</i> , social dialogue and international labour standards, including standards on non-discrimination and gender equality, as well as the more significant transformational drivers impacting the creation of decent work.
Viet Nam Decent Work Country Programme 2019-2025	The DWCP 2017-2021 promoted decent jobs, entrepreneurship development and preparedness of the workforce for a continuously changing environment. Above all, it supported issues related to sustainable development in Viet Nam. The review of the preceding DWCP and the current one demonstrates that recent growth stemmed mainly from the structural transformation of workers moving from the less productive agriculture sector to the more productive manufacturing and services sectors.

Compared to policy on Global and Regional level, most of the National policies have accommodate or incorporate urban and rural context, or at least considering urbanisation impact, urban rural labour force participation, opportunities, infrastructures, etc in formulating the strategies and programme. For example, some programmes that derived from National Policy in Malaysia is accommodating health facilities in rural areas. All people, including workers in the formal or informal sector or rural areas in Malaysia, have access to health and health facilities. In the context of worker mobility, workers have access to insurance schemes through their company or themselves, e.g., public servants have access to health or public hospitals for public servants. Also, Malaysia implemented the Food Basket Programme for families in need during MCO to ensure informal workers and targeted groups, e.g., single mothers, have assistance through this programme.

3.2.3. Health

Table 3.9. Relevant Main Coordination Government Mechanisms on Public Health Issues

Country	Action Plans	Action Plan Review
Brunei Darussalam	Brunei Darussalam National Multisectoral Action Plan for the Prevention and Control of Noncommunicable Diseases (BruMAP-NCD, 2013-2018)	WHO's "BruMAP-NCD" is a National Multi-sectoral Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2018. NCDs have been the top cause of deaths for more than three decades in Brunei Darussalam.
	Health System and Infrastructure Master Plan for Brunei Darussalam Framework (2015)	The master plan provided direction for the identification of appropriate key performance indicators. These include health status, service access and availability, coverage or interventions, risk factors and behaviours, as well as health infrastructure and security.
Cambodia	Cambodia Health Strategic Plan (2016-2020)	The Health Strategic Plan 2016-2020 (HSP3) is the third medium-term plan of the health sector. The second (2008-2015, HSP2) and the first plan (2003-2007) were launched at the National Health Congress. These plans were translated into action through the development and implementation of annual operational plans.
Indonesia	Strategic Planning Ministry of Health of the Republic of Indonesia (2015-2019)	The strategic plan (<i>Rencana Strategis</i> or RENSTRA) serves as the basis in the implementation of health development.
Lao PDR	Lao PDR – WHO Country Cooperation Strategy 2017-2021	The cooperation strategy was developed by leveraging these developments in consultation with Government agencies, the United Nations system, and other multilateral health and development partners.
	Lao PDR Health Strategy 2019-2023 (USAID, 2019)	USAID's top priority for health sector programming will support improved health and nutrition outcomes in Lao PDR. This support will include activities to empower women and girls. It will increase equitable access to and utilisation of reproductive, maternal, new-born, child, and adolescent health (RMNCAH and nutrition services).

Country	Action Plans	Action Plan Review
Malaysia	Strategic Framework of the Medical Programme Ministry of Health Malaysia 2021-2025	The Medical Programme is a joint venture between the Ministry of Health (MoH) and the Gambia's private sector. The scope of functions of the programme is focused primarily on the provision and development of secondary and tertiary care services in hospitals. It also has a massive role in facilitating the private health sector to grow and maintain standards.
	National Strategic Plan for Non-Communicable Disease Medium Term Strategic Plan to Further Strengthen the NCD Prevention and Control Programme in Malaysia (2016-2025)	The role of the private sectors and non-governmental organisations (NGOs) are expected to increase in this area.
	Malaysia – WHO Country Cooperation Strategy 2016-2020	The priorities that were identified reflects Malaysia's level of development and the significant capacity and resources that it has invested in health.
Myanmar	National Strategic Plan Intensifying Malaria Control and Accelerating Progress towards Malaria Elimination in Myanmar 2016-2020	The document is the final product of consultations with national staff working at various levels, international experts and stakeholders including the TSSG Group.
	WHO Country Cooperation Strategy Myanmar 2014–2018	GPHP's corporate contribution aims to supplement and support the healthy development efforts spearheaded by the Ministry of Health in Myanmar.
The Philippines	Philippines Country Development Cooperation Strategy 2019-2024	USAID's Health portfolio in the Philippines is currently focused on TB, family planning and health system strengthening. There has been no continued funding for Maternal Child Health, and infectious disease programming, to date, is limited to TB. This strategy highlights opportunities for USAID engagement for a more holistic approach to address the country's inter-related health challenges.
	Philippines – WHO Country Cooperation Strategy 2017-2022	The World Health Organisation (WHO) and the Philippines have launched a six-year plan for health cooperation. The strategy aims to realise the vision of the Philippine Health Agenda 2016-2022 as a stepping stone towards health-related SDGs.
Thailand	WHO Country Cooperation Strategy Thailand 2017-2021	The World Health Organisation (WHO) and the Thai Ministry of Public Health have outlined priorities for cooperation over the next five years. The CCS 2017-2021 for Thailand describes the medium-term strategic vision to guide Thailand's work with the global health community.
	Thailand Global Health Strategic Framework 2016-2020	Thailand Global Health Strategic Framework 2016-2020 was initiated and developed by the Ministry of Public Health. The framework aims to promote national policy coherence on global health across sectors. It also aims to enhance Thailand's health security and partner with other countries in the global health policy development process.

Country	Action Plans	Action Plan Review
Singapore	Healthier SG	Singapore's Healthier SG Strategy aims to address the challenges of an ageing population, shrinking workforce, increasing burden created by chronic diseases and the overall sustainability of the health system. The three main goals are (i) a Healthy population (ii) delivering the right care of good quality and (iii) at affordable and sustainable costs. This encompasses shifting the centre of gravity of chronic disease management away from acute settings to preventive, primary and community care, and addressing health needs and risk factors from a life course perspective.
Viet Nam	Viet Nam Five Year Health Sector Development Plan 2011-2015	Formulation of the five-year health sector was based on orientations and critical tasks for national socio-economic development. The elements consist of comprehensive master plans and strategy for the health sector. An overview of health care workers in recent years was also provided using evidence with the participation of Ministries, localities, the public, beneficiaries and donors.

3.2.4. Gender Equality and Social Inclusion

In responding to the needs to protect vulnerable groups in the context of urbanisation, all AMS have integrated their commitments into their national plans or strategies. Regardless of each national plan's implementation progress, documents listed in Table 3.10 below were aimed to accommodate the effort to fulfil vulnerable groups' rights. Those documents are used to reduce violence against women and girls, strengthen the existing child protection ecosystem, create opportunities for PWDs to engage entirely and reasonably in social activities, and increase the number of possibilities for the elderly to be meaningfully involved.

Table 3.10. National Government Mechanisms in AMS

Country	Document
Brunei Darussalam	Eleventh National Development Plan (2018-2023)
	National Framework on Child Protection (2020)
Cambodia	National Action Plan to Prevent Violence against Women (2019-2023)
	National Disability Strategic Plan (2019-2023)
	National Ageing Policy (2017-2030)
Indonesia	National Strategy for Accelerating Gender Mainstreaming (2012)
	National Law on Elimination of Violence against Women
	National Law on Child's Protection
	National Law on People with Disabilities
Lao PDR	National Human Rights Plan of Action (2015-2019)
	Second National Plan of Action on Preventing and Elimination of Violence Against Women and Violence against Children (2021-2025) (NPAVAWVAC)
Malaysia	Fourth National Plan of Action on Gender Equality (2021-2025) (NPAGE)
	National Women Policy
Myanmar	National Strategic Plan for the Advancement of Women (2013-2022)
	National Plan of Action for Children (2006 -2015)

Country	Document
The Philippines	Gender Equality and Women Empowerment Plan (2019-2025) (GEWE Plan)
	National Plan of Action for the Second Decade of Persons with Disabilities (2003-2012)
	3 rd National Plan of Action for Children, 2017-2022 (3 rd NPAC)
Thailand	Women's Development Plan in the 10 th National Economic and Social Development Plan (2007-2011)
	Third National Plan on Quality-of-Life Development of Persons with Disabilities (2007-2011)
Singapore	Conversations on Singapore Women's Development (2020-2021) and White Paper on Singapore Women's Development (2022)
	Taskforce on Family Violence Report (2021)
	3 rd Enabling Masterplan (2017-2021)
	National Approach Against Trafficking in Persons (2016-2026)
	Action Plan for Successful Ageing
Viet Nam	National Strategy on Gender Equality (2021-2030)

3.2.5. Environment

In attempts to properly address the environmental condition, several plans and policies were established by ASEAN member states. As many AMS experience frequent losses caused by environmental disasters, there are more plans and policies that have been developed for mitigating disasters than plans and policies to mitigate climate change impact despite the fact that environmental disasters and climate change impact are highly linked.

A. Brunei Darussalam

Brunei Darussalam has no specific law about disaster management. Instead, the 2006 Disaster Management order defines disaster management and the responsibilities and the authorities of The National Disaster Management Centre (NDMC).

1. Disaster Management Order (DMO), 2006

DMO was established with the NDC to develop a strategic policy framework to respond to and manage disaster risk for effective disaster management.

2. Strategic National Action Plan (SNAP) for disaster risk reduction 2012-2025

SNAP is a disaster risk reduction action plan with the target to build capacities of both government and non-government stakeholders. NDMC is the authority responsible to supervise implementation of this plan.

3. National Standard Operating Procedure (NaSOP) for response

All agencies involved in a disaster operation should follow NaSOP outlines for a more practical approach. NDMC periodically reviews simulation exercises and tests to keep updating and streamlining the responses.

4. Proclamation of Emergency (2017)

The proclamation of emergency declares that if the *Sultan* believes that there is a public danger or emergency, he could proclaim emergency status for Brunei.

B. Cambodia

Cambodia has developed institutional and legal arrangements to manage and plan disaster risk reduction. The national disaster management policies, plans and legislation are in Table 3.11.

Table 3.11. National Disaster and Climate Risk Reduction Policies, Plans, and Legislation in Cambodia

Policy	Purpose	Scope
Sub-decree No.54 ANKR-BK	Establishment of the National Committee for Disaster Management	National
Sub-decree No.30 ANKR-BK	Requiring the establishment of a disaster management committee below the national level	National, Provincial
National Action Plan for Disaster Risk Reduction (NAP-DRR) (2014-2018)	Define the country's DRR strategies on resilience building	National, Provincial, District
National Action Plan for Disaster Risk Reduction (2008-2013)	Focusing on poverty reduction and vulnerability reduction	National, Provincial, District
Law on Disaster Management	Identifies responsibilities and roles of institutions including formalising the role of the NDMC	National

Source: Cambodia Disaster Management Reference Handbook, 2020

1. Law on Disaster Management (2015)

The National Assembly passed Cambodia's Law on Disaster Management in June 2015. This law is a more authoritative and broader legislative mandate on disaster management. Hazard risk prevention programmes addressing climate change adaptation are specified to reflect Cambodia's vulnerability to climate change. In disseminating Law on Disaster Management, the Cambodia Red Cross became a crucial role in ensuring understanding of roles, rights, and various actors. The Cambodia Red Cross is supported by The International Federation of Red Cross and Red Crescent (IFRC) for developing systematic, practical, and inclusive dissemination. Stipulated in this law, there are three stated goals:

- a. Prevention, mitigation, adaptation in the pre-disaster period.
- b. Emergency response during a disaster.
- c. Recovery in the post-disaster period.

2. The National Action Plan for Disaster Risk Reduction (NAP-DRR) 2019-2023

The plan aligns with national law and other agendas, including the Paris Agreement on Climate Change, Sendai Framework, and Sustainable Development Goals, focusing on managing and reducing the impact of disaster and climate change. This focus is required to increase the sub-national level disaster risk reduction and enhance coordination. Over the next five years, NAP has become one of the prioritised guidelines in Cambodia. It aligns with the government set of "Rectangular Strategy" for Growth, Employment, Equity and Efficiency. In sum, there are five priority actions:

- a. Disaster risk governance.
- b. Understanding risk.

- c. Investing in disaster risk reduction.
- d. ensuring coherence and inclusiveness.
- e. Increasing preparedness and building back better.

C. Indonesia

1. BNPB Guideline Number 22 of 2010 on the Participation of Internal Institutions and Foreign Non-Governmental Organisations during Emergency Response

Specified responsibilities of TNI, guided the management of international assistance, and regulates the entry of foreign military personnel and capabilities related to coordination mechanisms.

2. Law of the Republic of Indonesia, Number 24 of 2007 Concerning Disaster Management

This law is the main legal document in Indonesia which guides Disaster Response in the country. It includes provisions for the authority and responsibilities of the disaster response and relief, emergency status, disaster management and financing.

3. National Disaster Response Master Plan 2020–2044

Indonesia has a long-term disaster management plan set for 25 years. This master plan has been detailed and divided into five-year plans.

4. National Disaster Response Action Plan 2020–2024

This action plan is a detailed version of the master plan. The action plan was formulated with reference to the National Disaster Response Master Plan. This plan has a term of 5 years.

D. Lao PDR

1. National Strategic Plan for Disaster Risk Reduction (2010–2020)

The Disaster Management Country Strategy was the first step in disaster risk management planning which is a phased master plan of the long term for DARR. The goals and implementation approaches are outlined in 2005, 2010, and 2020. Since 2010, continued support has been given to implement and develop an action plan to roll out the strategy (UNDRR, 2019). In 2003, the Plan for Disaster Risk Management 2003-2020 was issued and followed by The National Disaster Management Plan 2012-2015 in 2011. This plan provides a current policy framework for the country (Tropical Med Health 46, 42, 2018).

2. The Law on Disaster Management (2019)

The law consists of principles, measures, and regulations related to disaster management, including national economic and social development, as well as regional and international linkages. According to this law, every level should prepare a disaster management plan, such as urban planning, settlement provision, land use planning, development projects, and infrastructure construction, to increase resiliency towards disasters. By collaborating with relevant actors, local authorities, and organisations, The Secretariat of the Disaster Management Committee has to create disaster risk maps when building houses and villages, developing projects, and engaging in agricultural production. The law also set a risk information system for disaster management. The committee will also collaborate to create, improve, manage the Risk Information System linked with the National Statistical Information Database (Lao PDR Disaster Management Reference Handbook, 2021).

E. Malaysia

Malaysia's national guidelines are based on Directive No.20: National Policy and Mechanism on Disaster Management Relief (1997), issued by the National Security Council (NSC). Directive No. 20 consists of policy guidelines and guidance for rescue in line with the level of the disaster, a mechanism for managing responsibilities and roles of agencies involved in combatting disasters. Events of disaster that are included in this directive are:

- a. Natural disaster
- b. Industrial disaster
- c. The collapses of high-rise buildings
- d. Accidents involving transportation, drainage
- e. The emanation of toxic gasses
- f. Nuclear accident
- g. Fire
- h. Air disaster
- i. Train collision
- j. The collapses of a dam or water reservoir
- k. Haze causing environmental emergencies and threatening public health and order

Besides disaster management relief, Malaysia also has laws for preventive measures:

- a. The Land Conservation Act 1960,
- b. Environmental Quality Act 1974,
- c. Road, Drainage and Building Act 1974,
- d. Local Government Act 1976,
- e. Uniform Building Bylaws 1984, and
- f. Occupational Safety and Health Act 1994.

1. National Security Council Act of 2016

The National Security Council Act of 2016 was initiated on 1 August 2016, giving power to the Prime Minister to pronounce a public safety region dependent on the guidance of the National Security Council. Moreover, the Council can do everything essential or practical for or regarding its capacities, including coordinating and controlling government entities due to national security operations and issuing directives regarding national security.

The member of the National Security Council comprised of the Chairman (who is the Prime Minister), the Deputy Chairman (who is the Deputy Prime Minister), the Minister of Defence, the Minister of Home Affairs, the Minister of Communication and Multimedia, the Chief Secretary to the Government, the Chief of Defence Forces, and the Inspector General of Police.

2. Eleventh Malaysia Plan 2016-2020

In May 2015, the 11th economic development plan was issued for 2016-2020. The objective of this plan is to achieve Malaysia's aim to be considered as a high-income economy by 2020. In chapter 6, the plan detailed its focus area: Strengthening Resilience Against Climate Change and Natural Disasters. While Malaysia develops socio-economically, they ensure that natural disasters do not reverse development. In order to accommodate that, plan and preparation, including identifying communities

and areas at risk providing tools, are highlighted to prepare a comprehensive disaster risk framework. There are three strategies included in the plan:

1. Strategy D1: Strengthening disaster risk management by establishing the institutional framework, DRM policy and response capacity, improving disaster detection and incorporating DRM into development plans and improving community awareness;
2. Strategy D2: Increasing flood mitigation by new investments from flood mitigation projects, long-term planning and strengthening flood forecasting and warning systems; and
3. Strategy D3: Increasing climate change adaptation by developing a national adaptation plan, strengthening infrastructure resilience and natural buffers, including the agriculture and water sector, and enhancing awareness of health impact.

F. Myanmar

1. Myanmar Action Plan on Disaster Risk Reduction 2017 (MAPDRR)

The Myanmar Action Plan on Disaster Risk Reduction 2017 (MAPDRR) is a comprehensive risk reduction and management action plan with prioritising interventions and long-term goals until 2030. The previous plan (MAPDRR, 2012) established a multi-stakeholder disaster risk reduction collaboration framework. It identifies projects that must be committed in order for the government to achieve its obligations under the Hyogo Framework for Action and the ASEAN Agreement on Disaster Management and Emergency Response. The current Plan (MAPDRR, 2017) strives to link DRR goals with long-term development strategies such as five-year development/sectoral plans.

The current plan (2017-2020) focuses on the national implementation of several global and regional development and disaster risk reduction frameworks, declarations, action plans, and work programmes, as well as solid linkages between global and regional commitments not only on the Sendai Framework for Disaster Risk Reduction 2015-2030 but also on the Paris Agreement on Climate Change, to monitor and evaluate the plan's success.

2. Disaster Management Law and Rules (2013 and 2015)

The law establishes a legal framework for establishing disaster management bodies with diverse roles. The law also establishes roles and obligations, and also finances for disaster relief. The provisions of the law allow disaster management organisations to explicitly identify their responsibilities and areas of accountability. In addition, the 2015 Disaster Management Rules describe the law's provisions for execution.

3. Standing Order on Natural Disaster Management (2011)

The Standing Order outlines national disaster management entities' mandates, duties, and responsibilities. The Standing Order incorporates lessons learned from Cyclone Nargis and contains actions government agencies should take in future disasters. Normal Times, Alert and Warning, During Disaster, and Relief and Rehabilitation are the four disaster phases that the Ministry of Defence and Tatmadaw are responsible for. The Standing Order is being modified following the Sendai Framework and the new Disaster Management Law and Rules adopted under this law.

The plan's scope includes the entire nation and its most common risks, with 32 activities organised into four pillars. The Sendai Framework for Disaster Risk

Reduction is referenced in each pillar, comprising 6 to 9 priority activities. The following are the pillars:

1. Pillar 1: Assessing disaster risk in Myanmar, including extreme weather events, and raising public awareness about disaster risk reduction,
2. Pillar 2: Improving disaster risk governance to reduce and manage risk,
3. Pillar 3: Integrating disaster risk reduction into development planning, and
4. Pillar 4: Improving disaster preparedness for effective response and resilient rehabilitation and reconstruction.

G. Philippines

1. Philippine Disaster Risk Reduction and Management Act (DRRM Act 2010 or Republic Act No. 10121)

A multi-level disaster risk management system was developed under the Philippine National Disaster Risk Reduction and Management Act 2010 (DRRM Act 2010). According to the act, the NDRRMC is the highest policy-making body for coordination, integration, supervision, monitoring, and evaluation. The National Civil Defence and Disaster Risk Reduction and Management Program is administered by the Office of Civil Defence (OCD).¹⁵² The National Disaster Risk Reduction and Management Council was established under the DRRM Act as the guiding policy (NDRRMC).¹⁵³ The DRRM Act of 2010 is accompanied by a set of “Implementing Rules and Regulations” that detail the powers and responsibilities of the National, Regional, and Local Disaster Risk Reduction and Management Councils (DRRMCs), as well as provisions for the establishment of Local Disaster Risk Reduction and Management Offices (LDRRMOs) in each barangay.

H. Singapore

1. Whole-of-Government Integrated Risk Management (WOG-IRM) Policy Framework

The Singapore government uses a Whole-of-Government Integrated Risk Management (WOG-IRM) method to create a cross-ministerial policy framework for disaster risk reduction (DRR) and disaster management. The WOG-IRM strategy aims to raise risk awareness on a variety of levels. The framework offers the government and the general public an integrated approach to DRR awareness. Furthermore, the framework addresses cross-agency risks that the government may overlook. Medical response systems, mass fatality management, risk reduction laws for fire safety and hazardous chemicals, police operations, information and media management during crises, and public-private partnerships in disaster preparedness are all part of the WOG-IRM. In Singapore, the WOG-IRM policy framework is used in peacetime and emergencies. To manage risks, WOG-IRM creates a framework for all relevant agencies to collaborate within an established structure, with consistent communication and synchronisation. The home team comprises four basic members during peacetime activities.

I. Thailand

National and provincial authorities are required and encouraged to design their action plans and budgets for plan implementation and exercises. All line ministries and related agencies from national to local levels executes their DRM plans in conformity with the National DRM Plan 2015 and global frameworks, according to the Sustainable Development Goals (SDGs), Sendai Framework for DRR 2015– 2030, and Paris Agreement.

The Disaster Prevention and Mitigation Act, B. E. 2550, is the most critical legislative legislation controlling disaster management (DPM Act 2007). The DPM Act governs Thailand's approach to disaster management. The National Disaster Prevention and Mitigation Plan 2010-2014 (NDPM Plan) implements the DPM Act, which makes up the National Preparedness Policy and the Ministry of Defence's National Protection Plan. Its main concepts are as follows:

- a. Definition of disaster.
- b. Preparedness and mitigation.
- c. Formulation of mandates, responsibilities, and structure of Disaster management around key roles of Department of Disaster Prevention and Mitigation (DDPM) and National Disaster Prevention and Mitigation Committee.
- d. Decentralisation and the devolution of responsibility to the local level, accompanied by accountability mechanisms.

1. National Disaster Prevention and Mitigation Plan (2010-2014) (NDMP)

The National Disaster Prevention and Mitigation Strategy 2010-2014 is the principal national catastrophe management plan, intending to reduce disaster risks and property damage. For governmental and non-governmental agencies, guidelines are provided for pre-disaster, during-disaster, and post-disaster management operations. For all phases of the disaster management cycle, the plan aims to structure the operations and preparedness process across the agencies. The third primary goal is to strengthen the capacity of the agencies involved in disaster planning, prevention, response, mitigation, and rehabilitation. 131 The National Disaster Preparedness and Mitigation Plan (NDPM Plan) specifies the processes and duties of various actors and levels of government, and it covers all potential catastrophes from traffic accidents to tsunamis.

The Disaster Prevention and Mitigation Act also establishes Provincial and District Disaster Prevention and Mitigation Plans, Muang Pattaya Disaster Prevention and Mitigation Plan, and the Bangkok Metropolitan Disaster Prevention and Mitigation Plan.

2. National Disaster Risk Management Plan 2015

Through this plan, all relevant agencies are mandated to use the plan as a countrywide concept of operations to undertake disaster risk management actions in a coordinated, methodical, and in a coordinated manner. The plan serves as the country's principal disaster management strategy, emphasising lowering catastrophe risks and loss of life and property. For all phases of the disaster management cycle, the plan offers structure to all agencies' operations and readiness processes. Pre-disaster, during-disaster, and post-disaster management actions for governmental and non-governmental entities are outlined.

J. Viet Nam

The Viet Nameese government ensures that Disaster Risk Reduction (DRR) remains a top priority. They proactively plan to protect and react to the myriad of disasters incumbent on the country and its people. Thus, the government has developed several important legal documents, strategies, and plans with the general goal of assessing its risk and response to disaster management and prioritising its partnerships with neighbouring nations, particularly ASEAN members, to strategies recovery and assistance.

With highly defined targets and timetables, the National Strategy for Disaster Prevention, Response, and Mitigation to 2020 (2007) and the Action Plan National Strategy for Natural

Disaster Prevention, Response, and Mitigation to 2020 (2007) were implemented. These policies and programmes will not only mobilise resources to successfully implement disaster prevention, response, and mitigation from 2007 until 2020, but they will also make a substantial contribution to the country's long-term growth, national defence, and security. Priorities also include limiting the loss of life and property, harm to natural resources and cultural heritage, and environmental degradation. Several legislation and evaluations have been enacted to monitor and enhance these guidelines:

The Statute on Natural Disaster Prevention and Control (the Law), a 47-article law aimed at disaster risk reduction, climate change adaptation, and mitigation, was approved in June 2013 and implemented on 1 May 2014. It includes national, municipal, and neighbourhood rules. The law describes efforts to prevent and control natural disasters and national policies and programmes aimed at integrating them.

Disaster prevention should be incorporated into national and local socio-economic development plans. The law provides tasks and obligations to ministries, international partners, and other relevant players in disaster prevention and response. The Ministry of Agriculture and Rural Development is designated as the programme lead for creating knowledge of community-based natural disaster management, focusing on vulnerable populations. In addition, the law encourages the supply of insurance against natural catastrophe risks.

3.3. Relevant Policy Innovations in AMS in Recent Years

This section discusses relevant policy innovations in AMS. Acknowledging that these innovations could help to formulate recommendations for sustainable development and urbanisation.

3.3.1. Urbanisation

1. Smart Green ASEAN Cities Programme

Smart Green ASEAN Cities Programme is a programme funded by the European Union that will support or complement other ongoing initiatives in ASEAN such as the ASEAN Initiative on Environmentally Sustainable Cities, the ASEAN Smart Cities Network, the ASEAN Sustainable Urbanisation Strategy. The expected outputs of this programme are:

1. Enhanced design, planning and implementation of green and smart city solutions in selected cities.
2. Strengthened national capacity for green and smart development.
3. Increased exchange of good smart and environmental city management practices from the EU and ASEAN.

The bottom-up approach will be used from the city level, feeding into national and regional dimensions of sustainable urbanisation in ASEAN.

3.3.2. Education and Employment

Policy innovation formed by framework agreement and joint declaration between UN entities and ASEAN, in which some commitment was interpreted into an action plan, as a result of this several relevant policy innovations relevant to education and employment, as follows:

Table 3.12. Policy Innovations on Education and Employment

Policy	Policy Review
Plan of Action to Implement the Joint Declaration on Comprehensive Partnership between ASEAN and the United Nations (2016-2020)	Adhering to three pillars of ASEAN, this action plan addresses specific areas of cooperation, including political security, economic, socio-cultural and cross-sectoral, as a follow up action of a joint declaration between ASEAN and United Nations. Under the framework of socio-cultural cooperation, an action plan in fostering culture and education could be done through enhance collaboration and promote regional cooperation in the areas of education, training, research, and support ASEAN's enhanced role in regional and global research networks.
Vientiane Declaration on Transition from Informal Employment to Formal Employment towards Decent Work Promotion in ASEAN	In achieving a better quality of life for ASEAN people through increased workforce engagement in decent work by 2025, this policy envisioned to enhance well-being of workers and their families, inclusive growth, and eradicated poverty. Three key result areas that was highlighted include (i) strengthened policies, programmes and strategies to promote transition from informal employment to formal employment, (ii) improved data collection, research, and analysis (iii) enhanced capacities to support responsive policies.
Framework Agreement for Cooperation, ASEAN-UNESCO Indicative Joint Programme of Action (2014-2018)	This cooperation focused on seven priority areas; one of them was education. The joint programme of action in education includes the following areas of common interest, comprised of improving the quality of education and enabling inclusive education in formal and non-formal systems; promoting internationally agreed education goals including education-related development goals; promotion of learning societies via integration of life-long learning in the formal, non-formal and informal system; strengthening TVET/skills development, and; promoting education for sustainable development (ESD).

Conducted a Joint Program of Action in the form of a Framework Agreement could maintain the cooperation among various multilateral institution. However, unfortunately this joint declaration not even single one discusses about urbanisation context. Joint declaration and cooperation in ASEAN mostly in education sector, however there also cooperation programme in employment, such as decent work programme initiated by ILO and each AMS. Cooperative activities and promoting human and social development as stipulated in the ASEAN Socio-Cultural Community (ASCC) Blueprint could be foundation in strengthen cooperation to promote inclusive and equitable opportunities to quality education for all.

3.3.3. Health

Table 3.13. Policy Innovations on Public Health Issues

Policy	Policy Review
Plan of Action to Implement the ASEAN Leaders' Declaration (ALD) on Disaster Health Management (2019-2025)	ASEAN Plan of Action (POA) aims to operationalise the ASEAN Leaders' Declaration on Disaster Health Management (DHM). This POA is designed to provide guidelines for governments of AMS, AMS Sectoral Ministerial Bodies and the international community. It seeks to address regional challenges and opportunities by implementing the ALD on DHM over the next seven years.
The World Health Assembly Special Session: International Treaty on Pandemic Prevention, Preparedness and Response (2021)	International Convention on the Prevention, Preparation and Response of Pandemics, or the Pandemic Convention, was proposed to strengthen pandemics' prevention, preparation, and response. 194 member states of the World Health Organisation (WHO) will prepare a draft treaty for consideration at the 77 th World Health Assembly by May 2024.

3.3.4. Gender Equality and Social Inclusion

ASEAN promotes the welfare and empowerment of all children, PWDs, older people, and other vulnerable groups through high-level political declarations, regional action plans and frameworks, and by protecting their rights, protecting them from abuse, violence, discrimination, exploitation, and ensuring their meaningful participation in society.

Most importantly, ASEAN recognises the crucial role of all children, PWDs, the elderly, and the vulnerable as agents of change and as a resource for charting their growth. This is accomplished via the deepening and expansion of multi-stakeholder interactions and a multi-pronged and multi-sectoral strategy to achieve the social welfare and development agenda at the regional, national, and community levels.

Table 3.14. ASEAN's Key Documents on Social Welfare and Development

Year of Signature	Target	Key Documents
2011	PWDs	Bali Declaration on the Enhancement of the Role and Participation of Persons with Disabilities in ASEAN Community
2012	Women	Convening of the First ASEAN Ministerial Meeting on Women (AMMW)
2013	Children, Elderly, PWDs, Women	ASEAN Declaration on Strengthening Social Protection
2013	Children, Women	Declaration on the Elimination of Violence against Women and Elimination of Violence against Children in ASEAN (DEVAW and VAC)
2015	Children, Elderly, PWDs, Women	Regional Framework and Action Plan to Implement the ASEAN Declaration on Strengthening Social Protection
2015	Women	Convening of the Second ASEAN Ministerial Meeting on Women (AMMW)
2015	Children	ASEAN Regional Plan of Action on the Elimination of Violence Against Children
2015	Elderly	Kuala Lumpur Declaration on Ageing: Empowering Older Persons in ASEAN
2015	Children, Women	ASEAN Convention Against Trafficking in Persons, Especially Women and Children
2017	Elderly	Addressing the Challenges of Population Ageing in Asia and the Pacific
2018	PWDs	ASEAN Enabling Masterplan 2025: Mainstreaming the Rights of Persons with Disabilities
2019	Children	Declaration on the Protection of Children from All Forms of Online Exploitation and Abuse in ASEAN
2019	Children	Joint Statement on Reaffirmation of Commitment to Advancing the Rights of the Child in ASEAN
2019	Children	ASEAN Declaration on the Rights of Children in the Context of Migration

Source: ASEAN Website

3.3.5. Environment

1. Climate Leadership Academy (CLA) on Urban Climate Adaptation for Cities in Southeast Asia

A leadership activity was held to facilitate hands-on technical skill exchanges and virtual technical advice from a group of climate experts to develop and adapt practical approaches to solving the impact of climate change at the local level. It is part of a Pilot Partnership project between the United States (US) and ASEAN Member States (AMS). This platform theme is: “From Risk Barriers to Results – Managing the Social, Political, Environmental, and Financial Risk of Urban Infrastructure”.

2. ASEAN-India Summit: The 18th ASEAN-India Summit

In terms of environmental and disaster issues, at the most recent 18th ASEAN-India Summit, both parties agreed to continue strengthening cooperation in the fields of disaster management and biodiversity conservation. Also, both parties have committed to enhance collaboration in addressing climate change issues, conservation, sustainable management of biodiversity and natural resources, enhancing regional and sub-regional capacities on disaster management, and promoting sustainable and equitable development. ASEAN and India plan to share best practices and lessons learned to improve existing processes and mechanisms in ASEAN.

3. The Yogyakarta City Greenhouse Gases (GHG) Emissions and HEAT+ – Launch and Training

Collaborating with International Council for Local Environmental Initiatives (ICLEI) – Local Governments for Sustainability, the ASEAN-US Technical Assistance and Training Facility (ASEAN-US TATF), a two-day workshop was held. During the workshop, the use of ICLEI’s internationally recognized monitoring software system, the Harmonized Emissions Analysis Tool (HEAT+), was demonstrated. The purpose is to encourage AMS to adopt a systematic approach for inventorying GHG emissions and the use of tools. It is expected that this systematic approach can be utilised to develop effective strategies for low carbon economic growth and climate resiliency.

3.4. Available Tools for Policy Integration and Collaborative Action in ASEAN

This section discusses the available tools for policy integration and collaborative actions in ASEAN. Acknowledging these frameworks could help to formulate recommendations for sustainable development and urbanisation.

3.4.1. Urbanisation

1. East Summit Leaders’ Statement on Cooperation in Poverty Alleviation

In 2017, the Heads of State/Government of the AMS together with the Heads of State/Government Australia, the People’s Republic of China, the Republic of India, Japan, the Republic of Korea, New Zealand, the Russian Federation and the United States of America recognised that eradicating poverty is the greatest global challenge and an indispensable requirement for sustainable development. Poverty primarily impacts populations in rural areas and vulnerable groups. Thus, through this summit, they will

continue to use the forum for dialogue on broad strategic, political and economic issues of common interest and concern to promote peace, stability and economic prosperity in East Asia. The resulting statement highlighted the plan to emphasise and enhance cooperation between governments, strengthen engagements and partnerships, and support efforts on poverty eradication.

2. ASEAN Plus Three on Promoting Sustainable Development Cooperation

The resulting statement emphasised the commitment to implement the 2030 Agenda for Sustainable Development. It has also resulted into concrete actions and efforts to reduce poverty and narrow the development gap within and between countries, promote sustainable development of Micro, Small and Medium Enterprises (MSMEs), promote sustainable tourism cooperation, and enhance cultural exchange and cooperation will be done accordingly.

3.4.2. Education and Employment

Available tools for policy integration could be used for framework among labour ministries of AMS, ASEAN SLOM is one of the ASEAN sectoral bodies under the ASCC pillar that pursues regional cooperation on labour and matters concerning employment. SLOM and its three subsidiary bodies (SLOM Working Group on Progressive Labour Practices to Enhance the Competitiveness of ASEAN (SLOM-WG), ASEAN Committee on the Implementation of the ASEAN Declaration on the Protection and Promotion of the Rights of Migrant Workers (ACMW), ASEAN Occupational Safety and Health Network (ASEAN-OSHNET) implement projects and activities and cooperate in between meetings.

SLOM's objective and areas of cooperation are to assist ASEAN Ministers of Manpower in realising the ASEAN Leaders Vision of the Community of Caring Communities and the Vision Statement of the ASEAN Ministers of Manpower in promoting socio-economic development and stability in the region through the implementation of regional cooperation programmes to help realise industrial harmony, higher productivity, efficient use of human resources, greater job opportunities, and improving the quality of life of workers. The 17th ASEAN SLOM produces reports on the progress of AMS' programmes and activities in the employment sector, reported to the ASEAN Minister of Manpower at the ASEAN Manpower Ministers Meeting (ALMM).

ASEAN Member States are committed to prepare ASEAN workforce for the future of work. Some of the most recent commitments include ASEAN Declaration on Promoting Green Jobs for Equity and Inclusive Growth of ASEAN Community, ASEAN Labour Ministers' Statement on the Future of Work: Embracing Technology, ASEAN Declaration on Human Resources Development for the Changing World of Work and its multi-sectoral, multi-stakeholder Roadmap; ASEAN Declaration on Promoting Competitiveness, Resilience and Agility of Workers for the Future of Work.

The ASEAN Senior Officials Meeting on Education (henceforth known as SOM-ED) attempts to enhance regional understanding and cooperation and unity of purpose among Member States and achieve a better quality of life through education. In order to contribute to the vision for a socially cohesive and caring region, the shared goals and objectives for social and economic progress and integration of SOM-ED are done through the establishment of networks and partnerships, provision of an intellectual forum of policy makers and experts, and promotion of sustainable human resource development.

3.4.3. Health

Table 3.15. Available Tools on Public Health Issues

Policy	Policy Review
ASEAN Leaders' Declaration on Disaster Health Management	ASEAN leaders have endorsed the Sendai Framework for Disaster Risk Reduction (2015-2030), ASEAN-UN Joint Strategic Plan of Action on Disaster Management (2016-2020) and World Health Assembly Resolutions WHA64.10 Strengthening National Health Emergency and Disaster Management Capacities. Goal 3 of the 2030 Agenda for Sustainable Development calls for strengthened capacity in health risk reduction and management.
ALD on ASEAN Vaccine Security and Self-Reliance (AVSSR)	ASEAN has declared its commitment to work towards vaccine security and self-reliance in ASEAN. The declaration aims to recall the Global Vaccine Action Plan (GVAP) in improving health by extending by 2020 and beyond the full benefits of immunisation to all people.
ALD on Ending all Forms of Malnutrition	This declaration aims to welcome nutrition security-related commitments such as the 2015 U.N General Assembly declaration of 2016 to 2025 as the Decade of Action on Nutrition. It calls for the implementation of the Rome Declaration and its Framework for Action, endorsed by 170 countries during the IICN2 in 2014.
ALD on Antimicrobial Resistance (AMR): Combating AMR through One Health Approach	The AMS have come together to jointly cooperate in combating antimicrobial resistance (AMR) through a multi-sectoral and multidisciplinary approach. This aims to recognise the Global Action Plan on AMR adopted by the World Health Organisation (WHO) Member States in May 2015.
ASEAN Declaration of Commitment on HIV and AIDS: Fast-Tracking and Sustaining HIV and AIDS Responses to End the AIDS Epidemic by 2030	ASEAN's second regional report on HIV and AIDS of 2015 noted that in the region, the HIV epidemic continues to affect approximately 1.7 million people. There is a unique window of opportunity to act now, to avoid the risk of a rebound of the epidemic in some parts of the world, the report said.
Nusa Dua Call for Action on ASEAN Getting to Zeros City-based Network on Ending AIDS at the ASEAN Cities Leadership Forum on Getting to Zeros	ASEAN has issued a call for member states to strengthen the mechanisms for south-to-south cooperation, promote enabling policy and legal environment, promote fair and just trade practices, and ensure continuous effort towards the prevention and control of HIV and AIDS.

3.4.4. Gender Equality and Social Inclusion

ASEAN has issued political statements and undertaken regional action plans to advance gender equality and women's and girls' empowerment. Action research, policy discussions, and capacity development activities supplement ASEAN commitments. All of this contributes to the establishment and execution of specialised national laws, policies, and programmes that assure gender responsiveness and children's best interests.

ASEAN also encourages the creation of comprehensive and strategic regional frameworks for mainstreaming gender perspectives across all three ASEAN Community pillars, online child protection, and children in the context of migration, as well as the implementation of multi-year programmes and platforms such as the Women, Peace, and Security (WPS) agenda and addressing the needs of trafficked women and children. ASEAN's strategic policy advice on advancing gender equality and realising women's and children's rights has guided regional development cooperation toward sponsoring activities that increase the prominence of women's and children's rights.

Available tools for policy integration and collaborative action in ASEAN include ASEAN regional mechanisms, such as:

- a. ASEAN Intergovernmental Commission on Human Rights (AICHR)
- b. ASEAN Commission on Children and Women Rights (ACWC)
- c. ASEAN Disability Forum (ASEAN-DF)

The first two institutions hold mandates to support the fulfilment of human rights in general (AICHR) and women's and children's rights in particular (ACWC). While the third (ASEAN-DF) is a network composed by Disability People Organisations (DPOs) of the AMS, it is a platform where DPOs coordinate actions to advocate for disability-inclusive policy formulation and implementation.

As for ASEAN policies on women, children and PWDs are listed in the following:

Women's and children's rights:

- a. Ha Noi Declaration on the Enhancement of Welfare and Development of ASEAN Women and Children

Women's rights:

- a. Joint Statement of the Third ASEAN Ministerial Meeting on Women (AMMW)
- b. Joint Statement of the Second ASEAN Ministerial Meeting on Women (AMMW)
- c. Media Statement of the First ASEAN Ministerial Meeting on Women (AMMW)
- d. Vientiane Declaration on Enhancing Gender Perspective and ASEAN Women's Partnership for Environmental Sustainability
- e. Declaration on the Elimination of Violence Against Women in the ASEAN Region
- f. Declaration of the Advancement of Women in the ASEAN Region
- g. Joint Statement on Promoting Women, Peace and Security in ASEAN
- h. Action Agenda on Mainstreaming Women's Economic Empowerment (WEE) in ASEAN
- i. ASEAN Declaration on the Gender-Responsive Implementation of the ASEAN Community Vision 2025 and Sustainable Development Goals
- j. Joint Statement on Promoting Women, Peace and Security in ASEAN
- k. ASEAN Convention Against Trafficking in Persons, Especially Women and Children; ACTIP and Plan
- l. The Declaration on the Elimination of Violence Against Women and Elimination of Violence Against Children in ASEAN
- m. Declaration on the Elimination of Violence Against Women in the ASEAN Region
- n. Declaration of the Advancement of Women in the ASEAN Region

Children's rights:

- a. Joint Statement on Reaffirmation of Commitment to Advancing the Rights of the Child in ASEAN
- b. Declaration on the Protection of Children from All Forms of Online Exploitation and Abuse in ASEAN
- c. ASEAN Declaration on the Rights of Children in the Context of Migration
- d. ASEAN Declaration on the elimination of violence against children in ASEAN
- e. ASEAN regional plan of action on elimination of violence against children
- f. ASEAN Declaration on the Elimination of Bullying of Children in ASEAN
- g. ASEAN Declaration on the Commitments for Children in ASEAN

PWD's rights:

- a. Bali Declaration on the Enhancement of the Role and Participation of the Persons with Disabilities in ASEAN community
- b. Mobilisation framework of the ASEAN Decade of Persons with Disabilities (2011-2020)
- c. ASEAN 2025 Master Plans to Promote and Protect Disability Rights in ASEAN

3.4.5. Environment

In order to integrate policies and collaborations in ASEAN, some tools have been developed. One of the key challenges is related to finance. To address this problem, several avenues for financing have been developed, such as:

- a. ASEAN Disaster Management and Emergency Relief (AADMER) Fund
- b. ASEAN Development Fund (ADF)
- c. AHA Centre Fund

In the matter of financing to address climate change impacts in ASEAN, the funds are considered under tapped. Therefore, a collaboration among stakeholders was established and supported by Green Climate Funds (GFC) in 2020 to assist reducing carbon emission (mitigation) and improving resilience (adaptation).

1. ASEAN Emergency Response Assessment Team (ASEAN-ERAT)

Initially, the team was formed to accommodate daily situation updates due to the cyclone Nargis event in Myanmar in May 2008. Then, in March 2010, the AADMER Work Programme was formally adopted, finalising guidelines for the Deployment of ASEAN-ERAT and specific training for volunteers. The team was assigned to respond rapidly to a disaster event in the ASEAN region. Their role includes support to communications and coordination on behalf of the affected states and supports emergency logistics.

2. ASEAN Regional Disaster Emergency Response Simulation Exercise (ARDEX)

The full-scale simulation evaluates, tests, and practices ASEAN'S emergency response as well as disaster management mechanism. It is conducted every two years to evaluate the regional capabilities and process. As a result, it generates practical inputs for better implementation of AADMER, focusing on ASEAN SASOP.

3. ASEAN Joint Disaster Response Plan (AJDRP)

The purpose of the AJDRP is to create a common framework to deliver at-scale, timely, and joint response through assets and capacities mobilisation. The objectives of AJDRP include:

- a. Enhance timeliness of the ASEAN response by providing support to make timely and informed decisions
- b. Broaden the scale of ASEAN response by strengthening ASEAN standby arrangement
- c. Enhancing solidarity of the ASEAN Response through coordination and cooperation
- d. Joint Operations and Coordination Centre of ASEAN (JOCCA)

JOCCA is a coordination platform that reports to the NDMO of affected countries. It is linked to the United Nation's Onsite Operations and Coordination Centre (OSOCC).

- a. ASEAN Regional Forum Disaster Relief Exercise (ARF DiREx)
- b. Disaster Emergency Response Logistic System for ASEAN (DELSA)
- c. SASOP

In order to ensure efficient and effective preparedness and response, AADMER was required to form a Standard Operating Procedure for Regional Standby Arrangements and Coordination of Joint Disaster Relief and Emergency Response Operations (SASOP). It guides the member states to request assistance for disasters. SASOP also provides procedures for enhancing the readiness to respond and emergency coordination. In sum, SASOP provides:

- a. Procedures for joint disaster relief and emergency response
- b. Templates and guide to initiate the establishment of the ASEAN standby arrangements for disaster relief and emergency response
- c. Methodology for the periodic conduct of ASEAN regional disaster emergency response simulation exercise (ARDEX)
- d. Procedure for utilisation and facilitation of civilian and military capacities and assets.

4. ASEAN Militaries Ready Group (AMRG)

The group is prepared to strengthen the coordination of joint military cooperation of the member states working under ASEAN at the multilateral level. They provide coordination support with AMS militaries and other military liaison officers.

5. ASEAN Centre for Military Medicine (ACMM)

ACMM has a role in establishing effective, practical, and sustainable cooperation among the military medical services of AMS in crisis and normal situations. The group also cooperates with military medical services during humanitarian operations.

6. Logistics Support Framework

Increasing ASEAN's capacity and developing capabilities to extend operational effectiveness in addressing non-traditional security challenges.

7. ASEAN-US Joint Statement on Climate Change

The AMS and the United States of America have a solid response to the challenges in compelling and urgent matters. The United States appreciates and supports ASEAN's efforts to promote renewable energy sources, low emission development strategies, reduce deforestation, fight illegal logging and trading, and make their economies more resilient through adaptation, and has supported these efforts through initiatives that include technology transfers, climate finance, and capacity building.

8. ASEAN Working Group on Climate Change (AWGCC)

AWGCC was established in 2009 to supervise the implementation of the relevant action lines in the ASCC Blueprint. In 2012, the Action Plan on Joint Response to Climate Change was developed to set a more detailed reference in implementing the Blueprint.

9. ASEAN-China Joint Statement on Enhancing Green and Sustainable Development Cooperation

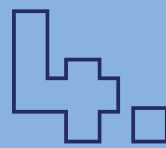
Through the 24th ASEAN-China Annual Summit in 2021, both parties reaffirmed the need to enhance ASEAN and China cooperation to support the ASEAN Comprehensive Recovery Framework. Concerning urban-rural continuum and its development, Both ASEAN and China have agreed to:

1. Support the implementation of the ASEAN Comprehensive Recovery Framework

2. Welcome the adoption and look forward for implementation of the Framework of ASEAN-China Environmental Cooperation Strategy and Action Plan (2021–2025);
3. Support the implementation of the *United Nations Framework Convention on Climate Change* and the *Paris Agreement* by joining efforts to encourage climate change mitigation and adaptation through energy transition, promotion of climate smart agriculture, knowledge sharing on climate change tackling, and explore nature-based climate solutions;
4. facilitate cooperation between the China-ASEAN Environmental Cooperation Centre and the ASEAN Centre for Biodiversity;
5. promote international exchanges and cooperation on ‘environmentally sustainable city’ under the framework of ASEAN-China Partnership for Eco-Friendly Urban Development through experience exchange in circular economy areas, environmentally-friendly management of solid waste, utilising ASEAN city-related platforms and initiatives, such as the ASEAN Smart Cities Network (ASCN) and the ASEAN Sustainable Urbanisation Strategy (ASUS);
6. facilitate the implementation of the project under the East Asian Cooperation Initiative on Poverty Reduction by focusing on institutionalise disaster preparedness programmes to environment and climate change risks towards resilient communities and households.

10. ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Programme (AWP) 2021-2025

In the latest AADMER Partnership Conference that was held on 8 June 2021, the new AWP received pledges and support from the partners, covering most outputs of all the five priority programmes, namely: (i) Risk Assessment and Monitoring, (ii) Prevention and Mitigation, (iii) Preparedness and Response, (iv) Resilient Recovery, and (v) Global Leadership.



**IDENTIFYING
CHALLENGES,
BARRIERS, AND
KEY OPPORTUNITIES
TO REDUCE
VULNERABILITIES
FOR SUSTAINABLE
AND INCLUSIVE
URBANISATION**

4.1. Challenges and Barriers

4.1.1. Urbanisation

To encourage the city's economic growth and create more employment opportunities and resulting in rapid development in the region, the challenges faced by AMS include equitable distribution of educational service facilities, employment, health, new technology, access to financial credit, and investment in the provision of public infrastructure under the needs of population growth to meet their essential needs. Currently, access to essential services provided by public infrastructure is not equally distributed among urban-rural communities. The increase in population and the expansion of residential land due to rural-urban migration in Cambodia, Malaysia, Indonesia, Viet Nam, and GMS have not been accompanied by inclusive planning and cross-sectoral collaboration between stakeholders. As a result, they have led to other problems such as poverty gaps, wage inequality in rural areas, traffic congestion, reduction of agricultural land, and environmental degradation in rural areas.

Land acquisition and land-use change impact rural economies, especially the agriculture sector upon which the livelihoods of rural communities often depend. Poorly planned land use changes could result in food insecurity, environmental degradation, loss of ecological services, and increase exposure to natural hazards, such as droughts or floods. Moreover, increased commercialisation of agriculture and labour replacement with capital investment has an impact on decreasing household income of agricultural workers and trigger economic instability where they have to adapt to the transition of livelihoods and engage in additional activities other than agriculture. Rural economic instability may also lead to more rural-urban migration thus contributing further to poorly planned urbanisation.

4.1.2. Education and Employment

Education plays a pivotal role in developing competent human resources that contribute to nation building and development. All governments commit themselves to provide equal access to high-quality education and learning to all their children and people. However, opening access to quality education and learning opportunities have several constraints. The primary challenge is balancing two conflicting requirements: First, the demand for rapid expansion of education provision in terms of scale. Second, the requirement to improve the quality of education provision. There is a tendency that quality is compromised in favour of rapid expansion.

Inequalities in education provision exist within AMS and between rural-urban areas and public-private education institutions. There are also gender and socio-economic conditions that result in disparities in the delivery of quality learning opportunities, especially concerning access to ICT. In Indonesia, educational disparities can be seen across urban and rural contexts for example, between the western and eastern parts of Indonesia which lack access to good quality education and among groups of people with varying gender and income which wealthy people get better education facility. In Viet Nam, the rate of female enrolments in upper secondary education schools, for example, is much lower than that of male enrolments and only 4 % (37,689) out of the total number of disabled children are in both special and integrated education (Information Management Centre, MOET).

Regard to employment, in recent years, the alignment between supply of skills and demand for skills that previously converged in the case of ASEAN has been increasingly impacted by key global shifts and trends. In particular, key shifts and trends have critical implications on either skill supply or skills demand in ASEAN. Key global trend affecting skills supply

has been the increased access to education. This has been driven particularly by the universalization of basic education which to varying degrees has also been accompanied globally by a diversification of education. Collectively, these shifts have impacted on both the “quantity” and “quality” of skills workforce. Economic and industrial transformation has brought about marked changes globally, particularly in terms of shifts in the allocation of employment across sectors, shifts in the occupational profile within each sector, and increases in labour productivity. In addition, technological advancement has had important impacts on employment, driving up demand for labour with advanced skills.

4.1.3. Health

Not all urban dwellers in the region benefit equally from urbanisation. Over 40% of Southeast Asia urban dwellers live in substandard housing and overcrowded slums where they may encounter malnutrition, poverty, and poor environmental conditions that have negative implications to their health (ADB, 2016). Coupled with reduced access to essential services and infrastructure, slums are prone to disease propagation and epidemics.

In developing countries, poverty can be characterised (primarily) by the following characteristics:

1. A sizeable growing gap in the provision of essential services.
2. Lack of access to proper and safe housing. This leads to severe overcrowding, homelessness and environmental hygiene problems.
3. Increased vulnerability to health problems, environmental shocks and natural disasters.
4. Growing inequality within the city. It is prominent in the issue of resident isolation and violence, affecting disproportionately between women and the poor.

Providing basic services in urban and rural areas is essential for public health. Some have achieved full coverage in Southeast Asia, while others have made significant progress, but many are still lagging. In some countries, the proportion of urban dwellers with primary water access declines in relation to the rising number of people living in informal settlements (State of Asian Cities Report, 2013). Poverty is also a persistent challenge faced by rural communities that impede them in receiving adequate health care and basic services, especially since the availability of basic services is lower compared to urban areas.

The observed challenges faced by most AMS in providing healthcare services in urban and rural areas are:

- a) Insufficient numbers of health workers,
- b) General shortage of fully functioning health facilities,
- c) lack of information and access available to communities regarding medical insurance, and
- d) limited access in remote areas due to infrastructures inequalities between urban and rural areas.

4.1.4. Gender Equality and Social Inclusion

Most AMS face similar challenges in achieving gender equality and social inclusion (GESI) owing to a lack of talent and infrastructure in rural regions and urban areas, where in the latter they face the challenge of social ramifications, which, in the long run, widens the divide between rural and urban areas. Nevertheless, in the end, it all depends on their country’s size and other associated elements. Therefore, each country has upped their efforts to address this issue.

Some countries have shaped their national aims or objectives in response to emerging GESI challenges. However, unlike other nations, the Philippines have failed to establish theirs due to a lack of data and records on people who appear to be struggling. Public awareness is one of the strategies for addressing these current problems. It is effective; nevertheless, practical implementation is a barrier for nations such as Thailand. They have addressed this issue with the existing “help post” in each area or province, although it remains a difficult for larger AMS with inaccessible and untraceable territory. The prevailing cultural beliefs, such as in Cambodia, also resulted in disparities in educational attainment between the sexes, which led to difficulties such as violence, heavy double duty at home and work, and the likelihood of child marriage and early pregnancy. Because of the inaccessible infrastructure, some individuals rely on existing customary laws.

Some nations, such as Brunei Darussalam and Singapore, have an inclusive national agenda that permits them to adjust their laws and regulations to meet these objectives. However, if it is not carefully managed, the actual goals will not be met. Some that have created their public transportation and public spaces, and construction laws based on PWD’s needs, have a difficult time maintaining and sustaining those current facilities due to a lack of awareness among other people and a lack of funds.

The challenges surrounding the inclusion of children are related to political instability, conflict, education, and protection. Political instability and conflict have led to the disregard of children’s rights to safe environments, education, medical care. In some cases, their right to freedom is violated during conflicts (Save the Children, 2021). The recent coup in Myanmar offers plenty of examples. The COVID-19 pandemic is also seen as a catalyst to the existing problem of child protection as a progressive result of the lockdown restrictions which have led to a lack of coping techniques or resources to assist them in counselling, thereby exacerbating the problems surrounding domestic abuse.

4.1.5. Environment

The high rate of urbanisation raises challenges and creates additional barriers in reducing vulnerabilities, achieving sustainable and inclusive urbanisation, including those related to climate change and disaster sectors. Declining agriculture productivity, at present and in the future due to climate variability, and lower wages force rural communities in AMS to migrate to urban centres in search of better livelihoods. In 2020, half of Southeast Asia’s population was urban, and by 2050, it is expected to be two-thirds, driven in part by continued rural-to-urban migration (Stockholm Environment Institute, 2020). Urbanisation in AMS has and will lead to additional pressures to the urban systems, which have led to loss of shelter, loss of livelihoods, food insecurity, loss of land and property, loss of production, unemployment, mass poverty, and forced migration. Urban systems, such as the power sector, land availability, transportation, etc, may not be able to cope with rising urbanisation. To meet the rising demand, more environmental resources will be exploited, and more emissions will be produced.

Rising populations also mean more exposure to unsafe conditions and vulnerability to natural hazards that are prevalent in urban settings, such as floods, fires, storms, building collapse, etc. Low-income populations tend to cluster in low-cost locations in informal areas, making it more difficult for planning authorities to manage their risks and exposure since it requires more resources, capacity, and political effort. During disasters, the response capabilities of stakeholders are challenged due to rising numbers of casualties and associated losses and damages.

4.2. Key opportunities

4.2.1. Urbanisation

The COVID-19 pandemic has resulted in less employment opportunities in urban areas due to large scale social and mobility restrictions. In order to seek employment, more affordable land prices and lower living costs, many urban residents relocated to rural areas, often to where they originally came from. Their interactions with the local community will bring changes, especially related to social patterns and lifestyles. Transfer of knowledge and skills from the migrants will be beneficial for the development of the local people. Additionally, forming a new city in the district can reduce the city's role in accommodating population growth and urban activities and positively increase district revenue through land and building taxes.

However, the pandemic also demonstrated that certain types of work and studies can be done remotely. This has prompted more urban residents to shift to non-urban areas where they are still able to continue their work. Therefore, with additional investment in telecommunications infrastructure to ensure connectivity in non-urban areas, remote working represents an ideal opportunity to release some of the pressures prevalent in urban areas through urban-rural relocation. This could help revive rural economies, diversify livelihoods, promote inclusive rural-urban development and connectivity in the future.

4.2.2. Education and Employment

Opportunities to expand educational facilities and infrastructure for primary education, secondary education and higher education in rural areas of AMS will increase education quality and create access to more inclusive education for low-income communities and disadvantaged groups. Innovations in curricula and teaching methods can help meet the fast-changing demand of the industries and address the challenges facing the youth in entering the labour market. The tools available for governments to manage change must respond to the new opportunities posed by globalisation, yet at the same time address domestic challenges associated with demographic population shifts, increased urbanisation and the informalisation of labour markets (Fernandez & Powel, 2009). Upskilling and reskilling in the rural-urban communities, primarily vocational education (TVET) in increasing demand for skilled human resources.

Arising opportunities ahead of future generation regard to education and employment through empowering ASEAN's young people skills, employment, opportunities through partnerships UNICEF East Asia and Pacific, the ASEAN Business Advisory Council, the EU-ASEAN Business Council, and UNDP held virtual forums supporting young people's empowerment to get future-oriented skills, decent employment, and entrepreneurship through Generation Unlimited ("GenU"). GenU is a global, multi-sector partnership to meet the urgent need for expanded education, training, and employment opportunities for young people. It connects businesses, governments, international organisations, and youth to catalyse investments towards youth development (UNICEF, 2021).

4.2.3. Health

This study emphasizes the need for prioritisation, better targeting, and effective pooling of public and private resources to make public health systems efficient and sustainable. Policy reforms that encourage the provision of health services and the participation of the private sector in insurance and regulatory frameworks to protect the environment can be vital elements of the reorganised health agenda.

The critical opportunity captured from several countries in the AMS is that if the health facilities are not built or the communities cannot reach urban areas. Health workers or village health volunteers will get people with health needs. This scheme will be implementable if supported by the affordable price of healthcare services.

4.2.4. Gender Equality and Social Inclusion

Urbanisation has resulted in the recognition of underdeveloped and inaccessible areas in AMS. The recognition leads to prioritised development where the regions eventually receive subsidies for more basic services such as water supply, sanitation, and safe-clean fuels, particularly in less developed areas where inhabitants have the potential to transform hardship into economic, social, and environmental opportunities.

Due to the availability of programmes centred on inclusion, there are now more vocational programmes, training, and rehabilitation services available for those in need, particularly persons with disabilities (PWDs). In conjunction with the aid of other organisations, these programmes might eventually help integrate PWDs in economic activity, decision-making processes, and social growth. The government might subsequently improve their previously created framework to assist PWDs in the working realm by focusing on distinct additional needs, whilst widening the target of PWDs could eliminate all of the hurdles they confront in society.

The government and other organisations require specific support from women to advance in the workplace. To ensure that, women continue to transition in an era where the gradual advancement of technology creates new job opportunities and avenues for economic advancement, which may cause women to shift their current majority of occupations to higher-skilled roles resulting in better-paid work in order to reduce the ever-growing wage gap in pursuit of gender parity. Thus, initiatives such as grants, training programmes, networking, and mentorship for women to challenge and overcome the gender-biased barrier in the workplace or school, particularly in science, technology, engineering, and mathematics (STEM), are known to be severely gender-biased.

Today's children are the heroes of tomorrow; therefore, children's rights must be prioritised for a brighter future in which they will rule the globe. As a result, the essential tools that play a significant role in protecting children's rights must be subjected to competent government oversight. The government should focus on children's challenges from early childhood development through adulthood. Also, the government should ensure that the children will have a safe environment to grow and focus on the children and their caregivers, such as their families and educators.

Child protection is made more difficult due to the mobility and social restrictions during the COVID-19 outbreak. It is more difficult to track down cases and lessen the odds of issues arising because most people are out of reach. More governments and other organisations are striving to re-examine their earlier laws and regulations to match the current scenario and avoid escalation of existing barriers to child protection and access to care. The effort will result in more robust preventative measures, improved response, greater access to quality service, coordination, and monitoring on the side of government authorities who target vulnerable groups. More governments may, and some may have already, taken the steps digitally by monitoring their populace via the internet and other government-led applications. They could also collaborate with non-government organisations and civil society organisations that are focused on social protection, child protection, education to broaden their reach.

4.2.5. Environment

Some of the benefits in implementing systems to enhance climate and disaster resilience are high levels of investment capital and employment rates. AMS countries could adapt best practices from other developed countries in relation to policy, strategies, and action plans on how to manage resources linked with urban-rural linkages. There are several strategies to address disaster and climate-change vulnerability in urbanisation. **From the technical** perspective, the transition from fossil fuels to renewable energy should primarily be considered to drastically reduce CO₂ emissions. In ASEAN, Singapore presents a good model for energy transition. Singapore adopted integrated technologies and energy data in public housing with micro-environmental modelling. This influences precinct layout. Innovative technology enabled existing energy distribution and generation systems to become more energy efficient. Another option is to expand the green area and forestation in AMS and adopt strict laws to discourage deforestation from increasing solar radiation absorption and reducing the surrounding temperature.

Other vital opportunities that can potentially be adapted in AMS include implementing a climate sensitive agriculture system, strengthening urban infrastructure, to address threats such as sea-level rise, building local capacity, bringing together policy priorities for both adaptation and disaster risk reduction, improve the resilience of public health systems, and enhance localized understanding of climate change.

From the economical perspective, climate and disaster resilience should be understood by prevailing economic systems so that they consider environmental and disaster shocks. Social protection can assist affected households to protect their well-being and achieve more rapid recovery (World Bank, 2019) by protecting access to basic needs, preventing deprivation, and promoting livelihood-enhancing capabilities (SEI, 2020). In national level, other AMS can adopt the Philippines, Indonesia, and Thailand DRM approaches or models that include shock-responsive social protection programmes. In the Philippines, the protocols of the Pantawid CCT include a provision that suspends conditionalities, where the health and education services are disrupted, for a limited period of time when a 'state of calamity' is declared (World Food Programme, 2019) with a contingency component that allows for certain projects and communities from NCDDP to address the recovery needs of communities better. In Indonesia, National Program for Community Empowerment Mandiri (PNPM Mandiri), uses a community-driven development approach that expand the possible activities in emergency situation. In Thailand, there is a protocol to extend the duration of unemployment benefits during emergencies.

4.3. Lessons Learned on Reducing Vulnerabilities and Sustainable/ Inclusive Urbanisation from Other Regions

4.3.1. Urbanisation

Unplanned urbanisation poses challenges for both urban and rural areas. Decentralisation may enable further urbanisation as local governments are given more authority to promote the development of their respective areas. To avoid the challenges present in rapid and uncoordinated urbanisation, transparent coordination between local and national governments is essential. The governments need to create strategies to identify urban development priorities, plan and coordinate actions by relevant stakeholders.

Dealing with the issue of rapid urbanisation – high concentration of population in urban areas and rapid urban expansion, within the planning perspective, the Malaysia Government formulated a comprehensive National Development Planning Framework. The framework has established a horizontal integration of national policies towards interpreting, coordinating, and rationalising sectoral policies. All planning-related policies and development plans are interrelated and well-coordinated with one goal: planning beyond conventional towards creating a more liveable and sustainable developed nation. Several efforts are made to maximise economic benefits, promote innovative ICT applications among rural entrepreneurs, and create more extensive groups of successful Malaysian Young entrepreneurs.

Taking a lesson from Singapore, with limited natural resources and land area, Singapore successfully meets the needs of accessibility, connectivity, and essential services for the people. Through the development of the city-state, Singapore managed to overcome the challenge faced by most urban areas, such as overcrowding, slums, traffic congestion, environmental pollution, floods, and water shortages. The critical principle of thinking long-term through Singapore's Concept Plan and applying planning principles consistently at all stages of the planning process is proven to resolve land-use conflicts up-front (Centre for Liveable Cities, 2014).

The design and implementation of an integrated rural policy require changes in inter- and intra-governmental relations between the public and private sectors and civil society (OECD, 2006). There are three key points that are required to develop rural areas, such as 1) The role of the central and regional government and vertical coordination mechanisms; 2) Horizontal coordination at the central level; 3) The role of local actors and lower horizontal relationships. The COVID-19 pandemic is raising the need in rethinking rural development. The return of urban dwellers to the rural areas is inevitable, considering the loss of jobs and economic downturn.

For example, The Saemaul Undong (Development Begins from the Village) movement in South Korea emphasises hard work, being productive, and being guided by the example of local leaders and a culture of cooperation in building infrastructure facilities. With technical guidance, monitoring, and (a little) capital assistance from the government, the movement aimed to transform lives in the village. The view of houses with thatched roofs, without electricity and clean water, turned into brick houses, tile roofs, electricity, and clean water. President Park, who constantly motivated the social movement, built a hard work and cooperation culture. In essence, human resources (HR) in rural areas were educated, collaborated and cooperated and were invited to solve problems together. The concept of Saemaul Undong was disseminated to all African and Asian countries by providing free training packages in South Korea (Huseini, 2020).

China has experienced a transformation of their rural economy. The existence of capital intervention, especially in the form of electrical energy, logistics services, technology, and leadership, has transformed Huaxi village into a competitive textile and steel product producing village. Huaxi Village also became prosperous because of the leadership of Wu Ren Bau (the village head), who ensured that the transformation runs well, is efficient, competitive and can involve local human resources so that the village unit businesses are empowered (Huseini, 2020).

Another example is Ireland who is taking advantage of the pandemic situation by planning on reviving its rural areas and economy. Four hundred remote hubs are scheduled as part of their rural development policy, 'Our Rural Future'. Ireland's vision of this policy is to create a thriving rural Ireland which is integral to their national economic, social, cultural and environmental wellbeing and development. The plan also aims to incentivise more people

to stay in or move to non-urban areas and provide financial support for local authorities to turn vacant properties in towns into remote working hubs.

4.3.2. Education & Employment

Understanding the issue of equity and quality in education will be simpler by looking at education as a system with all its interdependent components. In reducing challenges faced by Southeast Asian countries, particularly protecting those who are vulnerable, several measures have been undertaken by some AMS from which lessons could be learned, such as providing free education to all students, like Brunei Darussalam that provides education free of charge for all citizens from the age of 5 years to the university level. Indonesia has, under the nine years compulsory education policy, provided education to all school age children-free of charge.

Providing the schools and learning institutions with more and better learning facilities, paying attention to school infrastructure, and increasing the availability, accessibility and quality of textbooks and other learning materials are considered essential. The utilisation of technology also could be a supporting act both for teaching-learning processes and management purposes. For example, the Philippines and its ICT Plan for Basic Education (Sadiman, 2004). Another lesson learned comes from Singapore which provides adequate infrastructure and strengthens partnerships with the community, private, and business sectors to minimise the gap between education and industry.

In terms of employment, an estimated 244 million workers are in informal employment in the ASEAN region, with large disparities between developed and developing countries. The ASEAN Member States adopted the Declaration on Strengthening Social Protection in 2013, the Declaration on Transition from Informal Employment to Formal Employment Towards Decent Work Promotion in ASEAN in 2016 and the ASEAN Labour Ministers' Statement on the Future of Work in 2019. These instruments make the extension of social protection, particularly to workers in informal employment and in emerging forms of employment, one of the most important political agendas in the region.

Despite considerable progress in the extension of social protection in recent years, many people in the ASEAN region essentially remain unprotected. The challenges to extend social protection are manifold and diverse and vary across countries and types of workers. Many challenges related to the extension of coverage go beyond the scope of social security policies and administration. There is no one-size-fits-all solution for the extension of coverage. In many cases, a combination of approaches and measures is more effective in extending social protection in an effective and equitable manner.

4.3.3. Health

Access to healthcare services is critical to good health. People who live in rural areas, especially those who are poor, face various access barriers. Healthcare services are often difficult to access in rural areas, such as home health services, hospice and palliative care, mental health services, substance use disorder services, obstetric and maternal health services, and oral health services (RHlhub, 2020).

The challenges and barriers comprise (1) physical, social, and mental health status, (2) disease prevention, (3) detection, diagnosis, and treatment of illness, (4) quality of life, (5) avoiding preventable deaths, and (6) life expectancy (ODPHP, 2020).

A study case from Canada stated that healthcare in remote rural communities requires doctors and other health practitioners who have the skills and commitment to provide care responsive to the health needs of people living and working in these settings. Communication and transportation, to be said, have reduced the degree of isolation and enhanced the quality and effectiveness of education and care, even in the most remote environments (Strasser, 2016).

Meanwhile, in South Asia, primary healthcare is an essential feature of the healthcare system to secure population health, supported by Universal Health Coverage (UHC) as the key to ensuring access. This study case takes place in Bangladesh, India, Nepal, Pakistan, and Sri Lanka, presenting each country's primary healthcare. Similar to the AMS, the South Asia Region faces the challenges of non-communicable diseases (NCDs). This condition is worsened by the lack of support from policymakers resulting in insufficient investment in facilities and low priority of speciality training in the community settings. The challenges and how these countries overcome the situation of the healthcare system are a) financial, b) advocacy and c) speciality training.

The three strategies conducted to secure population health in Bangladesh, India, Nepal, Pakistan, and Sri Lanka by combining UHC and primary health are applicable in AMS. They considered that all of the AMS' UHC has higher index points, reaching 18.5 points higher than the SEA region, meaning that there is a chance to include the funding for primary health for the poor and those who live in remote areas. Speciality training is considered more suitable for AMS which faces lack of health workers. Therefore, providing speciality training for health workers in rural and remote areas is considered to gain a better health status.

In Europe, the health of the population is better than before. However, inequalities in health still exist where Western European countries have life expectancy and mortality rates that are better than Eastern European countries. This inequality results from different social positions and geographic locations. Those in the Central Business District (CBD) have better education, occupation, and income to access a better healthcare system. The lens of European cases shows that the government is trying to cut off the barriers from the root, providing better education access, resulting in a better job and income stability to achieve a better healthcare system. This strategy can be seen as an optimistic path for AMS whereby some countries have provided e-learning platforms and scholarships and dorms for those who live in remote areas, especially for girls. In terms of determinants of health, AMS should promote more in improving education access to rural areas to close the gaps between rural and urban areas. Moreover, detailed good practises in public health services worldwide are in Annex II.

4.3.4. Gender Equality and Social Inclusion

AMS has the modalities to fulfil the rights of women, children and PWDs. Such modalities include various international, regional and national policies and laws which serve as a ground for AMS to improve on the issue. There are also regional institutions such as AICHR, ACWC and ASEAN-DF working at the regional level as well as ministries and agencies operating at the national level to implement and take necessary actions in meeting the rights of women, children, and PWDs.

Nonetheless, problems lie at implementing the policies due to lack of human capacity, infrastructure, and general awareness on the importance of gender equality, children's, the elderly's, and PWD's rights. Meeting these rights and ensuring that no one is left behind are

significant parts of human development which is the spirit of the sustainable development goals (SDGs). No development is considered “successful” if it relies on economic indicators and benefits certain people only. Among stakeholders, coordination needs to be improved so that the recognition of rights is cross-cutting with the tasks and responsibilities of various institutions.

In the context of urbanisation, improvement is required on matters specifically related to fulfilling the rights of migrant women, children, the elderly, and PWDs, so that they can gain maximum benefits of urbanisation. It is also essential to improve coordination between stakeholders in rural and urban regions and ensure that policies and programmes in both areas are connected. Detailed good practises in gender equality-related constitutions across the world is in Annex II.

4.3.5. Environment

Increasing capacity in order to reduce urban-rural vulnerability needs comprehensive intervention. Burkina Faso, through a single pilot project, adopted a comprehensive set of national policies on urban services. With cooperation from UN-Habitat, UNEP, national and international partners, a Basic Urban Services programme (PASUB) was launched in early 2004. The project employed the “home centred environmental sanitation” (HCES) technique as part of an integrated, multidisciplinary approach to the community’s requirements based on an initial environmental assessment. The Cities and Climate Change Initiative (CCCI) of UN-Habitat assisted the municipality in enacting the critical national policy frameworks agreed by the central government in 2007, include adaptation to climate change, poverty reduction, rural development, and integrated management of water resources. Urban planning often incorporates reforestation. Bobo Dioulasso’s adaptation to climate change includes preventing desert spread through forest preservation and regeneration. In Bobo-Dioulasso, reforestation is focused on the area’s forested shrines. No hunting, dwelling, farming, or woodcutting are permitted in these sacred groves for cultural and religious reasons, and access is limited.

The Sustainable Cities Programme’s Basic Urban Service programme has fostered cross-sector collaboration across municipal services. Reforestation plans and assistance for urban agriculture are two examples of successful resilience-building measures. The Basic Urban Services component’s garbage collection pilot project was successful, with the number of homes paying for a private service rising from under 6% to over 20%. This adds to the service’s long-term viability. A wastewater management system was installed, including better rainfall drains and access to fresh water (including through micro-credit), thereby reducing the danger of flooding during heavy rains. In addition, illegal trash disposal facilities were demolished, lowering CO2 emissions. These initiatives were bolstered by the community and civil society awareness-raising and education activities. The Houet River banks, which are vital for market gardening, have been stabilised (with World Bank financing) due to the peri-urban “green corridor” initiative and committed public support is now strengthening and supporting urban agriculture.





5.

**RECOMMENDATION
FOR REGIONAL
ACTIONS AND
STRATEGIES IN ASEAN**

This section discusses a list of recommendations for national, regional, and international actions and strategies to promote sustainable development and urbanisation. The principal consideration in formulating the recommendations include the integrated policy and collaborative framework, the existing COVID-19 situation, areas for Collaboration and Integration within ASEAN bodies, areas for transnational collaboration, medium/ Short-term Agenda for AMS and sub-national governments, and lastly, areas for ASEAN-UN Collaboration on policy, data, action plan, and framework for managing urban-rural continuum and people's mobility.

5.1. Integrated Policy and Collaborative Framework

1. Strengthen vertical and horizontal collaborations particularly in providing infrastructure, protecting environments, and assisting vulnerable groups, to ensure that the processes and outcomes of urbanisation provide fair opportunities for everyone to achieve decent and quality lives and do not compromise environmental functions.
2. Manage the dynamics of urbanisation from the urban side and rural areas considering their close linkages. Develop strategies using a regional perspective that considers the specific characteristics of the urban-rural continuum in each case.
3. Central governments as well as collaboration and coordination between national and sub-national governments need to pay attention to the place-specific characteristics of urbanity (or rurality) strategies, including the different sizes of the urban (mega/big, intermediate, small cities) and the positionality in the urban-rural continuum. There are no one-size-fits-all policy models in stimulating sustainable urbanisation.
4. Strengthen collaboration to meet the SDG No. 4 agenda, develop policy to address urbanisation issues by increasing access and inclusiveness of the education sector, investing in human resources education in STEM development and digital technology, and policy on investment in the education sector for facilities and infrastructure development, expanding TVET programmes in rural and peri-urban areas.
5. Strengthen and develop a new concept of the urban welfare model that addresses urbanisation and its public health consequences, requiring a multi-sectoral approach.
6. Strengthen coordination among stakeholders to meet the rights of women, children, the elderly, and PWDs, particularly those related to urbanisation. Also, increase the involvement of communities, especially vulnerable groups (women, children, the elderly and PWDs), in urban planning/urban development.
7. Pioneer an integrated environmental information and policy monitoring that bridge the urban-rural divide and systematically monitor changes across the urban-rural continuum in terms of goods and ecosystem services. This can start from the water and river management monitoring across ASEAN concerning its disaster and climatic risks, including biodiversity.

5.2. Considering COVID-19 and Recovery

1. Promote and accelerate COVID-19 recovery, especially in smaller cities and rural areas, using digital technology as an instrument, for instance, through the implementation of smart agriculture.
2. Address the digital divide through education support solutions to swiftly transform traditional teaching and learning methods into synchronous and asynchronous methods. This can be done by using digital platforms and technology, as not all schools and communities have access to such technology, especially children from urban and rural low-income families.
3. Up-skilling and re-skilling the capability of urban-rural communities in adapting the current and future labour force in the new digital era to meet the transformation challenges as an impact of the pandemic.
4. Develop programmes to tackle violence against women and children during the pandemic. The pandemic made things worse as (among other lockdowns) there has been an increasing number of domestic violence and online gender-based violence. Most victims are women and children (girls).
5. Improved coordination between ASEAN-DF and DPOs in each country of AMS is necessary to implement programmes written in point 4.

5.3. Areas for Collaboration and Integration within ASEAN Secretariat Divisions and relevant Centre/Facilities

1. Strengthen collaboration in facilities and infrastructure development and investment for education across AMS to minimise the digital divide between urban-rural areas.
2. Innovation centres within ASEAN are recommended to manage the risk of population growth and urbanisation, including challenges due to demographic and epidemiological transitions.
3. ASEC and existing ASEAN mechanisms, i.e. AICHR, ACWC, ASEAN-DF, arrange collaborative programmes involving all AMS in promoting gender equality, children's, the elderly's, and PWDs' rights, with a particular focus on urbanisation.
4. Initiate outreach and capacity building initiatives across relevant ASEAN divisions, sectoral bodies, and centres/facilities within ASEAN on the importance of systematically using urban-rural continuum lenses across sectoral operations.

5.4. Areas for Transnational Collaboration

1. Strengthen collaboration in developing strategies for promoting sustainable urbanisation through policy networking, e.g. sister cities and similar initiatives.
2. Work together with ASEAN partners in secondary and tertiary education, especially in STEM-related fields, knowledge sharing and innovative research.

Investing in Human Resources in Technology and Agriculture sector to support green and decent jobs as well as labour markets in sustainability.

3. Collaborate with international networks or organisations to promote rural-urban migrant's health and the capacity development of health care workers and other human resources to enhance the quality of healthcare provision.
4. Strengthen collaboration among AMS to meet the rights of women, children, the elderly, and PWDs, which can be done through the ASEAN mechanism, i.e. AICHR, ACWC, ASEAN-DF.
5. Identification of transboundary climatic, disaster, and environmental risks profile and scenarios to systemically address varying levels of capacity and vulnerability projected in the urban-rural continuum of several areas' interests, among others, across CLMV countries.

5.5. Medium-/Short-term Agenda for ASEAN Member States National Governments

1. Coordinate, orchestrate, strengthen systematic data collection and monitoring system on urbanisation across development sectors. This requires a seamless process with the statistical bodies of all AMS and requires capacity building of relevant bodies.
2. Devote more attention to sustainable urbanisation, where rural-urban migrants' need for free primary and secondary education may be addressed by developing programmes for low-income families and PWDs. Member states must ensure the provision of quality education in rural schools and enhance the training of teachers' capabilities in schools to implement innovative curricula.
3. Support existing roadmaps on urbanisation and health that includes concrete actions and government strategies on health risks such as water, sanitation, hygiene, air pollution, gender issues, etc. The roadmap should indicate actions to be promoted to ensure equal access to health care. ASEAN should advocate each AMS to ensure that (our recommendation) as response strategies addressing urbanisation and health will be included in the national health strategic plan.
4. Devote special attention to rural-urban migrant women, children, the elderly, and PWDs in the context of urbanisation and law enforcement.
5. Revisit and update national-level climate change impact, disaster, and environmental risk profiles and scenarios by investigating potential disruptions from those risks to the continuum and mobility of goods, people, and services across urban and rural areas. This is crucial to identify a critical prioritised urban-rural continuum within a specific sub-national area that must be protected for the nation's interest in sustainable development.

5.6. Medium-/Short-term Agenda for Sub-national Regional/Provincial Governments

1. Invest more in human resources development, by developing facilities and ICT infrastructure in rural areas and community college programmes for lifelong learning with life skills, such as entrepreneurship programmes.
2. Establish coordination structures between different sectors of urban governance interacting with health to facilitate coordination on government- local, regional, and national levels. This coordination, ideally, is supported by global actions.
3. Ensure policies and programmes accommodate specific needs of women, children, the elderly, and PWDs, meeting the various dynamic context of urbanisation at the sub-national level.
4. Revisit national-level climate change impact, disaster, and environmental risk profiles and scenarios by investigating potential disruptions from those risks to the continuum and mobility of goods, people, and services across urban and rural areas. From this perspective, sub-national level authorities must identify potential capacities from rural areas to reduce risks to the central urban areas and vice versa.

5.7. Areas for ASEAN-UN Collaboration on Policy, Data, Action Plan, and Framework for managing urban-rural continuum and people's mobility for inclusive development

1. Strengthen cooperation and develop programmes that promote gender equality and children's, the elderly's, and PWD's rights, with a particular focus on urbanisation, i.e. migrant women, children, the elderly, and PWDs.
2. Explore a joint strategic plan of action for harmonisation of policy strategies that mainstream urban-rural continuum approaches and perspectives across sectoral agencies to promote the processes of sustainable urbanisation and rural development within the region.

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ANNEX I. URBAN-RURAL CLASSIFICATION IN AMS

Country/ Region	Urban-Rural Classification	Source
ASEAN	<ol style="list-style-type: none"> 1. Mega Regions → Population number of 5 million and above 2. Large middleweights → Population number of 1 million - 5 million 3. Small middleweight → Population number of 500,000 - 1 million 4. Small regions → Population number of 300,000 - 500,000 5. Rural regions → Population number of below 300,000 	ASEAN. (2018a). ASEAN Sustainable Urbanisation Strategy . Jakarta: The ASEAN Secretariat.
1 Brunei Darussalam	<p>The concepts and definitions used in Population and Housing Census 2011:</p> <ol style="list-style-type: none"> 1. District: Brunei Darussalam is divided into four districts namely Brunei Muara, Belait, Tutong and Temburong. 2. Mukim: Each district is divided into several mukims and in each mukim there are a number of kampungs or villages. Usually a mukim is headed by a Penghulu and a kampung or village is headed by a Ketua Kampung. 3. Kampung: A Mukim is divided into several kampungs or villages with a Ketua Kampung or Village Headman for each or a group of them depending on the sizes of the kampungs. <p>Urban: Municipality areas of Bandar Seri Begawan, Kuala Belait, Seria, Pekan Tutong and Pekan Bangar; and heavily populated areas with urban characteristics.</p>	<p>Department of Economic Planning and Statistics, Brunei Darussalam. (2011). Preliminary Report Concepts and Definitions. Retrieved from http://www.deps.gov.bn/DEPD%20Documents%20Library/DOS/BPP2011/Preliminary%20Report%20Concepts%20and%20Definitions.pdf</p> <p>UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.</p>
2 Cambodia	<p>Urban: Areas at the commune level satisfying the following three conditions</p> <ol style="list-style-type: none"> (1) Population Density exceeding 200 per square Km, (2) Percentage of male employed in agriculture below 50 percent (3) Total population of the commune exceeds 2 000 inhabitants. <p>Urban reclassification</p> <ol style="list-style-type: none"> 1. Economic and demographic aspects <ul style="list-style-type: none"> - Total population of the commune is over 2,000. - Population density in excess of 200 per km² - Percentage of employment in non-agricultural occupations in excess of 50 percent 2. Statutory administrative aspects <p>Towns identified on the basis of statutory administration or recognized by decrees and laws. The first category of urban units is known as statutory towns. These towns are recognised by the relevant government bylaw and have local bodies like municipalities/krongs, irrespective of their demographic characteristics.</p> 	<p>UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.</p> <p>Cambodia National Institute of Statistics, Ministry of Planning. (2020). General Population Census of the Kingdom of Cambodia 2019. Retrieved from https://cambodia.unfpa.org/en/publications/general-population-census-kingdom-cambodia-2019-0</p>

3	Country/ Region	Urban-Rural Classification	Source
	Indonesia	<p>Urban: Area which satisfies certain criteria in terms of population density, percentage of agricultural households, access to urban facilities, existence of additional facilities, and percentage of built up area not for housing.</p> <p>Article 2:</p> <ol style="list-style-type: none"> (1) The criteria for urban areas are certain requirements in terms of population density, percentage of agricultural household, and the presence/access to urban facilities owned by a <i>desa/kelurahan</i> to determine the status of the <i>desa/kelurahan</i>. (2) Urban facilities as mentioned in paragraph (1) are: <ol style="list-style-type: none"> a. Sekolah Taman Kanak-kanak (TK); b. Junior High School; c. High School; d. Traditional market; e. Shops; f. Movies; g. Hospital; h. Hotel/billiard hall/clubs/wellness center/ salon; i. Percentage of households using telephone; and j. Percentage of households using electricity. (3) Determination of the value/score to define as urban and rural areas of the <i>desa/kelurahan</i> as referred to in paragraph (1), namely: <ol style="list-style-type: none"> a. Urban areas, if the total score of the population density, percentage of agricultural household, and the presence/access to urban facilities is 10 or over; and b. Rural areas, if the total score of the population density, percentage of agricultural household, and the presence/access to urban facilities is less than 10 	<p>UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.</p> <p>Statistics Indonesia. (2010). <i>Peraturan Kepala Badan Pusat Statistik Nomor 37 Tahun 2010 tentang Klasifikasi Perkotaan dan Perdesaan di Indonesia</i>.</p>

Country/ Region	Urban-Rural Classification	Source
4	<p>Lao PDR</p> <p>Urban: Areas or villages that satisfy at least three of the following five conditions: located in metropolitan areas of district or province, there is access to road in dry and rainy seasons, more than 70 percent of the population has access to piped water, more than 70 percent of the population has access to public electricity, there is a permanent market operating every day.</p> <p>Article 3 Under this law, a city means a place where the community lives, having the following characteristics:</p> <ul style="list-style-type: none"> It is the location of the capital city of the country, or of a municipal city, a provincial city, a special zone city, a district city, or an area of socio-economic concentration; It has a certain density of population; It has a public infrastructure and supply system, such as: road networks, sewerage systems, hospitals, schools, stadiums, public parks, water supply, electricity, telephone, and others. <p>Cities are classified into the following three levels:</p> <ul style="list-style-type: none"> Cities belonging to the central [level]; Cities belonging to provinces, municipalities and special zones; Cities belonging to districts. <p>The national Population and Housing Census records</p> <ol style="list-style-type: none"> a. whether a village is part of a municipality of a district or a province, and b. classifies villages as “urban” if any three of the following criteria are met: <ul style="list-style-type: none"> - village is part of a province or district municipality; - >70% of households use electricity; - >70% of households use piped water; - village is accessible by road all year around; - village has permanent all day market. 	<p>UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.</p> <p>Law Committee of the National Assembly of the Lao PDR. (1999). Law on Urban Plans.</p> <p>Urbanization processes in the Lao PDR: Processes, challenges and opportunities, 2018, from Centre for Development and Environment University of Bern, Switzerland. Retrieved from https://www.shareweb.ch/site/Poverty-Wellbeing/equality-equity-inclusion/Documents/Lao_Urbanization_Study_CDE_final.pdf</p>
5	<p>Malaysia</p> <p>Urban: Gazetted areas with their adjoining built-up areas which have a combined population of 10,000 or more. Built up areas are defined as areas contiguous to a gazetted area and have at least 60 percent of their population (aged 15 years and over) engaged in non-agricultural activities. The definition of urban areas also takes into account the special development area which is not gazetted and can be identified and separated from the gazetted area or built-up area of more than 5km and a population of at least 10 000 with 60 percent of the population (aged 15 years and over) engaged in non-agricultural activities.</p>	<p>UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.</p>
6	<p>Myanmar</p> <p>Urban: Areas classified by the General Administration Department as wards. Generally, these areas have an increased density of building structures, population and better infrastructure development.</p>	<p>UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.</p>

Country/ Region	Urban-Rural Classification	Source
7 The Philippines	<p>NOW, THEREFORE, BE IT RESOLVED AS IT IS HEREBY RESOLVED that the Board approve for adoption by all concerned the definition of urban areas recommended by the TCPHS as follows.</p> <ol style="list-style-type: none"> (1) If a <i>barangay</i> has a population size of 5,000 or more, then a <i>barangay</i> is considered urban, or (2) If a <i>barangay</i> has at least one establishment with a minimum of 100 employees, a <i>barangay</i> is considered urban, or (3) If a <i>barangay</i> has 5 or more establishments with a minimum of 10 employees, and 5 or more facilities within the two-kilometer radius from the <i>barangay</i> hall, then a <i>barangay</i> is considered urban. <p>BE IT RESOLVED FURTHER that: All <i>barangays</i> in the National Capital Region be automatically classified as urban; All highly urbanised cities be subjected to the urban-rural criteria in order to determine its urban-rural classification....</p> <p><i>Barangay</i>: the smallest administrative division in the Philippines and is the native Filipino term for a village, district, or ward.</p>	Philippine Statistics Authority. Adoption of the Operational Definition of Urban Areas in the Philippines. (2003). Retrieved from https://psa.gov.ph/article/adoption-operational-definition-urban-areas-philippines
8 Singapore	Singapore is a city-state.	UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.
9 Thailand	<p>Urban: municipal areas. Rural: non-municipal areas</p> <p><i>Tambon</i>: a local governmental unit in Thailand. Below district (<i>amphoe</i>) and province (<i>changwat</i>), they form the third administrative subdivision level.</p>	ILO. Inventory of official national-level statistical definitions for rural/urban areas. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---stat/documents/genericdocument/wcms_389373.pdf
10 Viet Nam	<p>Urban: including inside urban districts within cities or towns Rural: all the other base administrative units (communes)</p>	UN DESA. (2020). Demographic Yearbook 2019. New York: United Nations.

ANNEX II. SUPPORTING DATA, FIGURES, TABLES

Table 1. Percentage of the Urban Population Residing in Each Urban Agglomeration with 300,000 or more in 2018

Location	2010	2015	2020	2025	2030	2035
Cambodia						
Phnom Penh	52.4	51.7	51.3	51.4	51.4	51.4
Indonesia						
Ambon	0.3	0.3	0.3	0.4	0.4	0.4
Balikpapan	0.5	0.4	0.4	0.4	0.4	0.4
Bandar Lampung	0.7	0.7	0.7	0.7	0.7	0.7
Bandung	2.0	1.8	1.7	1.6	1.6	1.6
Banjarmasin	0.5	0.5	0.5	0.5	0.5	0.5
Batam	0.8	0.9	1.0	1.1	1.1	1.1
Bekasi	1.9	2.1	2.2	2.3	2.3	2.3
Bengkulu	0.3	0.3	0.3	0.3	0.3	0.3
Bogor	0.8	0.8	0.8	0.8	0.8	0.8
Cirebon	0.2	0.2	0.2	0.2	0.2	0.2
Denpasar	0.7	0.6	0.6	0.6	0.6	0.6
Depok	1.4	1.6	1.8	1.9	1.9	1.9
Jakarta	8.0	7.4	7.0	6.8	6.8	6.8
Jambi	0.4	0.4	0.4	0.4	0.4	0.4
Jayapura	0.2	0.2	0.2	0.2	0.2	0.2
Makassar (Ujung Pandang)	1.1	1.1	1.0	1.0	1.0	1.0
Malang	0.7	0.6	0.6	0.6	0.6	0.6
Manado	0.3	0.3	0.3	0.3	0.3	0.3
Mataram	0.3	0.3	0.3	0.3	0.3	0.3
Medan	1.7	1.6	1.5	1.5	1.5	1.5
Padang	0.7	0.7	0.6	0.6	0.6	0.6
Palembang	1.2	1.2	1.1	1.1	1.1	1.1
Pekalongan	0.2	0.2	0.2	0.2	0.2	0.2
Pekan Baru	0.7	0.8	0.8	0.8	0.8	0.8
Pontianak	0.5	0.4	0.4	0.4	0.4	0.4
Samarinda	0.6	0.6	0.7	0.7	0.7	0.7
Semarang	1.3	1.2	1.2	1.2	1.2	1.2
Sukabumi	0.2	0.2	0.2	0.2	0.2	0.2
Surabaya	2.3	2.1	1.9	1.8	1.8	1.8
Surakarta	0.4	0.4	0.3	0.3	0.3	0.3
Tangerang	1.5	1.5	1.5	1.5	1.6	1.6
Tasikmalaya	0.5	0.6	0.7	0.8	0.8	0.8
Yogyakarta	0.3	0.3	0.3	0.3	0.3	0.3
Lao PDR						
Vientiane	32.3	29.1	26.2	25.0	25.0	25.0

Location	2010	2015	2020	2025	2030	2035
Malaysia						
Alor Star	1.3	1.3	1.3	1.4	1.4	1.4
Ipoh	3.3	3.2	3.2	3.2	3.2	3.2
Johor Bahru	4.0	4.0	4.0	4.0	4.1	4.1
Kota Bharu	1.5	1.4	1.4	1.3	1.3	1.3
Kota Kinabalu	2.1	2.1	2.2	2.2	2.2	2.2
Kuala Lumpur	29.1	30.0	31.5	32.3	32.6	32.6
Kuala Terengganu	1.6	1.5	1.5	1.5	1.5	1.5
Kuantan	1.9	1.9	2.0	2.0	2.0	2.0
Kuching	2.6	2.5	2.4	2.4	2.4	2.4
Sandakan	1.6	1.5	1.5	1.4	1.4	1.5
Seremban	1.9	1.9	1.9	1.9	1.9	1.9
Myanmar						
Mandalay	7.6	8.1	8.4	8.5	8.5	8.5
Nay Pyi Taw	1.6	2.4	3.5	4.2	4.3	4.4
Yangon	30.2	31.0	31.2	31.0	31.0	31.0
Philippines						
Angeles City	0.8	0.9	1.0	1.0	1.1	1.1
Antipolo	1.6	1.6	1.7	1.7	1.7	1.7
Bacolod	1.2	1.2	1.2	1.2	1.2	1.2
Bacoor	1.2	1.3	1.3	1.3	1.3	1.3
Baguio City	0.8	0.7	0.7	0.7	0.7	0.7
Basilan City (including City of Isabela)	0.9	1.0	1.0	1.1	1.1	1.1
Batangas City	0.7	0.7	0.7	0.7	0.7	0.7
Binan	0.7	0.7	0.7	0.8	0.8	0.8
Butuan	0.7	0.7	0.7	0.7	0.7	0.7
Cabuyao	0.6	0.7	0.7	0.8	0.8	0.8
Cagayan de Oro City	1.4	1.4	1.4	1.5	1.5	1.5
Calamba	0.9	1.0	1.0	1.0	1.0	1.0
Cebu City	2.0	2.0	1.9	1.8	1.8	1.8
Cotabato	0.6	0.6	0.6	0.6	0.6	0.6
Dasmariñas	1.4	1.4	1.4	1.5	1.5	1.5
Davao City	3.4	3.5	3.5	3.5	3.5	3.5
General Santos City	1.3	1.3	1.3	1.2	1.2	1.2
General Trias	0.6	0.7	0.8	0.8	0.8	0.8
Iligan	0.8	0.7	0.7	0.7	0.7	0.7
Iloilo City	1.0	1.0	0.9	0.9	0.9	0.9
Imus	0.7	0.9	1.0	1.1	1.1	1.1
Lapu-Lapu City	0.8	0.9	0.9	0.9	0.9	0.9
Lipa City	0.7	0.7	0.7	0.8	0.8	0.8
Mandaue City	0.8	0.8	0.8	0.8	0.8	0.8
Manila	28.0	27.3	26.8	26.4	26.4	26.4
San Fernando	0.7	0.7	0.6	0.6	0.6	0.6
San Jose del Monte	1.1	1.2	1.2	1.1	1.1	1.1

Location	2010	2015	2020	2025	2030	2035
San Pedro	0.7	0.7	0.7	0.7	0.7	0.7
Santa Rosa	0.7	0.7	0.8	0.9	0.9	0.9
Tarlac	0.8	0.7	0.7	0.7	0.7	0.7
Zamboanga City	1.9	1.8	1.8	1.7	1.7	1.7
Singapore						
Singapore	100.0	100.0	100.0	100.0	100.0	100.0
Thailand						
Buri Ram	1.3	1.3	1.3	1.3	1.3	1.3
Chanthaburi	0.8	0.9	1.0	1.1	1.1	1.1
Chiang Mai	3.2	3.3	3.3	3.2	3.2	3.2
Chiang Rai	1.5	1.5	1.5	1.5	1.5	1.5
Chon Buri	3.9	3.9	3.9	3.9	3.9	3.9
Kalasin	1.4	1.4	1.4	1.4	1.4	1.4
Khon-Kaen	1.4	1.4	1.4	1.4	1.4	1.4
Krung Thep (Bangkok)	28.1	28.7	29.5	29.7	29.7	29.8
Lampang	1.3	1.3	1.3	1.2	1.2	1.2
Lamphun	0.9	0.9	0.9	0.9	0.9	0.9
Lop Buri	0.8	1.0	1.2	1.4	1.4	1.4
Nakhon Pathom	1.1	1.3	1.4	1.5	1.5	1.5
Nakhon Ratchasima	2.2	2.2	2.2	2.1	2.1	2.1
Nonthaburi	2.7	2.7	2.7	2.7	2.7	2.7
Pathum Thani	2.5	2.6	2.6	2.5	2.5	2.5
Phra Nakhon Si Ayutthaya	1.2	1.2	1.2	1.2	1.2	1.2
Phuket	1.2	1.2	1.2	1.2	1.2	1.2
Ratchaburi	1.1	1.1	1.1	1.1	1.1	1.1
Rayong	1.5	1.5	1.5	1.5	1.5	1.5
Roi Et	1.2	1.2	1.2	1.2	1.2	1.2
Sakon Nakhon	1.1	1.1	1.1	1.1	1.1	1.1
Samut Prakan	3.6	3.7	3.7	3.6	3.6	3.6
Samut Sakhon	1.6	1.6	1.6	1.6	1.6	1.6
Songkhla	2.7	2.7	2.7	2.7	2.7	2.7
Suphan Buri	0.8	0.9	0.9	1.0	1.0	1.0
Surat Thani	1.4	1.4	1.4	1.4	1.4	1.4
Ubon Ratchathani	1.4	1.4	1.4	1.4	1.4	1.4
Udon Thani	1.6	1.6	1.6	1.6	1.6	1.6
Viet Nam						
Bien Hoa	2.6	2.7	2.8	2.8	2.8	2.8
Can Tho	3.2	3.7	4.4	4.8	4.9	4.9
Da Nang	3.0	3.0	3.1	3.1	3.1	3.1
Hà Nội	10.4	11.6	12.7	13.3	13.5	13.5
Hai Phòng	3.3	3.4	3.5	3.6	3.6	3.6
Hue	1.2	1.1	1.1	1.1	1.1	1.1
Long Xuyen	0.9	0.9	0.9	0.8	0.8	0.8

Location	2010	2015	2020	2025	2030	2035
Nha Trang	1.1	1.0	0.9	0.8	0.8	0.8
Thành Phố Hồ Chí Minh (Ho Chi Minh City)	23.0	23.2	23.4	23.4	23.4	23.4
Thu Dau Mot	0.8	0.9	1.1	1.2	1.3	1.3
Vungtau	1.1	1.1	1.1	1.1	1.1	1.1

Source: UNDESA (2018).

Table 2. Built-up Area in AMS

Country	Square kilometres				Percent of total area			
	1975	1990	2000	2014	1975	1990	2000	2014
Brunei Darussalam	19.92	24.58	29.71	32.19	0.34	0.42	0.50	0.55
Cambodia	97.24	154.67	249.19	326.47	0.05	0.09	0.14	0.18
Indonesia	6,661.77	8,533.91	11,810.56	13,969.31	0.36	0.46	0.63	0.75
Lao PDR	38.12	65.05	106.66	160.7	0.02	0.03	0.05	0.07
Malaysia	2,348.11	2,605.50	3,329.79	3,857.80	0.71	0.79	1.01	1.17
Myanmar	484.87	701.6	1,093.74	1,377.50	0.07	0.11	0.16	0.21
Philippines	1,228.73	1,538.67	1,914.52	2,201.45	0.42	0.53	0.65	0.75
Singapore	178.18	178.18	186.44	191.08	31.71	31.71	33.18	34.00
Thailand	2,514.85	3,925.33	5,312.36	6,723.09	0.49	0.76	1.03	1.31
Viet Nam	2,652.85	3,447.34	4,907.74	5,808.97	0.81	1.06	1.50	1.78
ASEAN	16,224.64	21,174.83	28,940.71	34,648.56	0.37	0.48	0.66	0.78

Source: OECD (2020).

Table 3. Multidimensional Poverty Index: changes over time based on harmonized estimates

Country	Multidimensional Poverty Index (MPI) _t		Population in multidimensional poverty		
	Year and Survey	Value	Headcount (%)	Intensity of Deprivation (%)	Number of poor (year of the survey) (thousand)
Cambodia	2010 D	0.228	47.7	47.8	6,827
Cambodia	2014 D	0.170	37.2	45.8	5,680
Indonesia	2012 D	0.028	6.9	40.3	17,076
Indonesia	2017 D	0.014	3.6	38.7	9,514
Lao PDR	2011/2012 M	0.210	40.2	52.1	2,593
Lao PDR	2017 M	0.108	23.1	47.0	1,604
Philippines	2013 D	0.037	7.1	52.0	7,042
Philippines	2017 D	0.028	5.6	49.8	5,852
Thailand	2012 M	0.005	1.4	36.9	943
Thailand	2015/2016 M	0.003	0.8	39.0	578
Thailand	2019 M	0.002	0.6	36.7	402

Note:

- 1) The difference between harmonized estimates with the previous survey is not statistically significant at the 95 percent confidence interval.
- 2) Missing indicators on nutrition.
- 3) Missing indicators on school attendance.

Source: UNDP & OPHI (2021).

Table 4. Multidimensional Poverty Index: developing countries

Multidimensional Poverty Index			Population in multidimensional poverty					
			Headcount	Intensity of deprivation	Number of poor (year of the survey)	Number of poor (2019)	Inequality among the poor	Population in severe multi-dimensional poverty
Country	Year and survey	Value	(%)	(%)	(thousands)	(thousands)	Value	(%)
Indonesia	2017 D	0.014	3.6	38.7	9,578	9,794	0.006	0.4
Lao PDR	2017 M	0.108	23.1	47.0	1,604	1,654	0.016	9.6
Myanmar	2015/2016 D	0.176	38.3	45.9	20,325	20,708	0.015	13.8
Philippines	2017 D	0.024	5.8	41.8	6,096	6,266	0.010	1.3
Thailand	2019 M	0.002	0.6	36.7	402	402	0.003	0.0
Cambodia	2014 D	0.170	37.2	45.8	5,680	6,131	0.015	13.2
Viet Nam	2013/2014 M	0.019	4.9	39.5	4,490	4,722	0.010	0.7

Source: UNDP & OPHI (2021).

Table 5. School Facilities and Infrastructure in AMS

ASEAN Regions	Primary Level			Lower Secondary			Upper Secondary		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Schools with access to electricity (%)									
Brunei Darussalam	100	100	100	100	100	100	100	100	100
Indonesia	90.5	93	93.1	94.7	96.8	96.8	n/a	97.9	98.7
Lao PDR	37.3	n/a	n/a	72.2	n/a	n/a	89	n/a	n/a
Malaysia	99.3	100	98	100	100	98.7	100	100	99.2
Myanmar	n/a	27.4	n/a	59.9	n/a	75.6	65.7	68.7	74.2
Singapore	100	100	n/a	100	100	n/a	100	100	n/a
Schools with access to computers for pedagogical purposes (%)									
Indonesia	n/a	32	40.1	n/a	42	48.1	67.1	67.2	n/a
Malaysia	99.3	100	n/a	100	100	93	100	100	91.8
Myanmar	n/a	0.9	0.5	n/a	3.5	2.7	n/a	23.8	24.6
Schools with access to internet for pedagogical purposes (%)									
Indonesia	n/a	n/a	n/a	n/a	n/a	46.5	n/a	85	85.2
Malaysia	99.3	100	97.2	100	100	98.4	100	100	95
Myanmar	n/a	0.2	0.2	n/a	0.8	1.4	n/a	11.6	13.1
Schools with access to basic drinking water (%)									
Indonesia	57.8	58.1	58.3	47.3	n/a	57.6	57.6	56.7	59.9
Malaysia	99.3	100	92.1	100	100	95.8	100	100	97.5
Myanmar	70.9	70	74.8	n/a	77	82.1	n/a	83.2	88.5
Philippines	48.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Singapore	100	100	n/a	100	100	n/a	100	100	n/a
Schools with access to single-sex basic sanitation (%)									
Cambodia	48.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Indonesia	n/a	n/a	49.8	n/a	n/a	60.3	n/a	n/a	55.1
Malaysia	99.3	100	100	100	100	100	100	100	99.9

ASEAN Regions	Primary Level			Lower Secondary			Upper Secondary		
	2016	2017	2018	2016	2017	2018	2016	2017	2018
Myanmar	n/a	66.3	64.4	n/a	n/a	67.3	n/a	71.8	74.6
Philippines	32.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Singapore	100	100	n/a	100	100	n/a	100	100	n/a
Schools with basic hand-washing facilities (%)									
Brunei Darussalam	100	100	100	100	100	100	100	100	100
Cambodia	48.8	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Indonesia	n/a	n/a	69.1	n/a	n/a	66.1	n/a	n/a	72.6
Malaysia	99.3	100	92.1	100	100	95.8	100	100	92.6
Myanmar	n/a	51.6	56.4	n/a	58.8	60.6	n/a	64.6	70.7
Philippines	49.5	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Singapore	100	100	n/a	100	100	n/a	100	100	n/a
Schools with access to adapted infrastructure and materials for students with disabilities (%)									
Malaysia	n/a	n/a	40.2	n/a	n/a	58.4	n/a	n/a	47.4
Myanmar	n/a	n/a	0.6	n/a	n/a	58.4	n/a	n/a	0.5

Source: UNESCAP (2020)

Table 6. Rate of Informal Employment by Urban/Rural, Sex, and Age Group in AMS (workers in informal employment/total employed), Excluding Agriculture (%)

No.	Country	Area		Sex		Age Group				
		Urban	Rural	Male	Female	15-24	25-39	40-59	60-64	65 and older
1	Brunei Darussalam (2017)	47.6	43.3	46.9	46.2	58.8	47.4	43.1	38.4	32.3
2	Cambodia (2012)	85	93.2	87	93.8	96.7	90.7	82.9	87.5	94.3
3	Indonesia (2018)	39.1	54.8	40.1	50.2	31.7	37.4	50.9	71.8	77.9
4	Lao PDR (2017)	70.8	80.9	71.8	79.6	84.9	70.7	76	84.3	87.9
5	Malaysia (2017)	10.3	12.5	11	10.1	9.7	11	18.9	3.4	-
6	Myanmar (2017)	78.1	90.2	81.2	87.4	94.2	85.5	77.5	78.9	73.6
7	Philippines (2018)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8	Singapore	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	Thailand (2018)	35	40	36.4	37.8	30.9	26.3	42.5	69.2	82.9
10	Viet Nam (2016)	48.5	65.2	60.7	53.3	N/A	N/A	N/A	N/A	N/A

Source: ASEAN Statistic Division (2018).

Table 7. Policy for Disaster Management and Climate Change

Countries	Policy for Disaster Management	Policy for Climate Change
Brunei Darussalam	<ol style="list-style-type: none"> 1. Brunei Darussalam's Disaster Management Strategy 2. Brunei Vision 2035 Disaster Management Order 3. National Disaster Council-- National Disaster Management Centre 4. Strategic National Action Plan (SNAP) for Disaster Risk Reduction 2012-2025 5. National Standard Operating Procedures for Response 6. Brunei's Strategic National Action Plan 	<ol style="list-style-type: none"> 1. Brunei Darussalam National Climate Change Policy (BNCCP)

Countries	Policy for Disaster Management	Policy for Climate Change
Cambodia	<ol style="list-style-type: none"> 1. Sub-decree no 54 ANKR-BK 2. Sub-decree no 30 ANKR-BK 3. The National Action Plan for Disaster Risk Reduction (NAP-DRR) 2019-2023 4. National Action Plan for Disaster Risk Reduction (NAP-DRR) (2014-2018) 5. Law on Disaster Management (2015) 	<ol style="list-style-type: none"> 1. National Strategic Plan on Green Growth 2013–30
Indonesia	<ol style="list-style-type: none"> 1. Law of the Republic of Indonesia Number 3 of 2002 on National Defence 2. Law of the Republic of Indonesia Number 34 of 3. Disaster Management Strategic Policy (2015- 2019) 4. Law of the Republic of Indonesia, Number 24 of 2007 Concerning Disaster Management 5. Government Regulation Number 23 of 2008 concerning participation of international Institutions and Foreign Non-Governmental Organisations in Disaster Management 6. National Disaster Management Plan (2010-2014) 7. BNPB Guideline Number 22 of 2010 on the 8. Role of the International Organisations and Foreign Non-Government Organisations during Emergency Response 	<ol style="list-style-type: none"> 1. Low Carbon Development Initiative (LCDI) 2. Roadmap NDC Adaptation 3. Long Term Strategy (LTS LCCR)
Lao PDR	<ol style="list-style-type: none"> 1. National Strategic Plan for Disaster Risk Reduction (2010-2020) 2. The Prime Minister's Decree No 158 (1999) 3. Prime Minister's Decree No. 373 (2011) 4. Periodical Strategic Plan on Disaster Risk Management (2003-2005/2005-2010/2010-2020) 5. Strategy on Climate Change of the Lao PDR (2010) 6. Prime Minister's Decree 220 (2013) 7. Inter-Agency Contingency Plan (IACP) (2013/2014) 8. The Law on Disaster Management (2019) 	<ol style="list-style-type: none"> 1. National Green Growth Strategy (NGGS) 2. Agriculture and Forestry Research Strategy (AFRS) 2025 and the 'Vision up to 2030'
Malaysia	<ol style="list-style-type: none"> 1. National Security Council Act of 2016 2. Eleventh Malaysia Plan 2016-2020 	<ol style="list-style-type: none"> 1. Shared Prosperity Vision 2030 2. National Renewable Energy Policy and Action Plan 2011
Myanmar	<ol style="list-style-type: none"> 1. Myanmar Action Plan on Disaster Risk Reduction 2017 (MAPDRR) 2. Disaster Management Law and Rules (2013 and 2015) 3. Standing Order on Natural Disaster Management (2011) 4. Emergency Response Preparedness Plan (ERPP, 2017) 	<ol style="list-style-type: none"> 1. Myanmar Climate Change Master Plan (2018–2030) 2. Myanmar Climate Change Policy (2019) 3. Myanmar Climate Change Strategy (2018- 2030) 4. Myanmar Sustainable Development Plan 2018–2030

Countries	Policy for Disaster Management	Policy for Climate Change
Philippines	<ol style="list-style-type: none"> 1. Philippine Disaster Risk Reduction and Management Act (DRRM Act 2010 or Republic Act No. 10121) 2. National Disaster Risk Reduction and Management Framework (2011) 3. National Disaster Risk Reduction and Management Plan 2011-2028 (NDRRP) 4. Strengthening Disaster Risk Reduction in the Philippines: Strategic National Action Plan (SNAP) 2009-2019 5. National Disaster Response Plan for Hydro-meteorological Hazards (2014) 	<ol style="list-style-type: none"> 1. Local Climate Change Adaptation Plan (LCCAP) 2. Climate Disaster Risk Assessment (CDRA) 3. & National Climate Risk Management Framework (NCRMF)
Singapore	<ol style="list-style-type: none"> 1. Civil Defence Act 1986 2. Civil Defence Shelter Act 1997 3. National Tsunami Response Plan 	<ol style="list-style-type: none"> 1. Singapore Green Plan 2030 2. Singapore's Long- Term Low-Emissions Development Strategy
Thailand	<ol style="list-style-type: none"> 1. Disaster Prevention and Mitigation Act 2007 2. National Disaster Prevention and Mitigation Plan (2010-2014) (NDMP) 3. Strategic National Action Plan (SNAP) on Disaster Risk Reduction 2010-2019 4. Eleventh National Economic and Social Development Plan 2012-2016 	<ol style="list-style-type: none"> 1. Climate Change Master Plan 2015–2050 2. Thailand 4.0 3. National Strategy 2018–2037 4. National Adaptation Plan (NAP) 2018–2037
Viet Nam	<ol style="list-style-type: none"> 1. The National Strategy for Natural Disaster Prevention, Response and Mitigation to 2. 2020 (2007) and accompanying Action 3. Plan National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 4. The National Target Program to Respond to Climate Change (2007) [NTP-RCC] 5. Decision 1002/2009/QD-TTg on Approving the Plan for Community awareness raising and Community-Based Disaster Risk Management (2009) 6. The National Strategy on Climate Change (2011) 7. Law on Natural Disaster Prevention and Control (2013) 8. Decision 46/2014/QDD-TTg to regulate the forecast, warning and information transmission of disasters 9. Decision 44/2014/QDD-TTg to regulate the level of disaster risk 10. Other legal documents aimed at strengthening the organisation and functions of the CCFSC, the VINASARCOM and its branches at ministries and localities (Decree 66/2014/ND-CP; Decision 76/2009/QD-TTg) and the mobilisation, receiving, delivery, and management of relief aid (Decree 64/2008/ ND-CP, Decree 67/2007/ND-CP (replaced by Decree 13/2010/ ND-CP) and Decision 142/2009/QD-TTg, Decree 94/2014.) 	<ol style="list-style-type: none"> 1. National Climate Change Strategy 2. National Green Growth Strategy 3. Resolution No.55-NQ/TW 4. Strategy for Viet Nam's Low-emission Development and Green Growth by 2050 5. National Plan on Climate Change Adaptation for 2021–2030, with a vision towards 2050

ANNEX III. LESSONS LEARNED AND GOOD PRACTICES WORLDWIDE

Practices in developing good public health services across the world

A. Regions of the Americas (AMR)

Rural areas often encounter barriers to healthcare that limit the people who live in rural areas to obtain the needed care. It is necessary to provide appropriate healthcare services to have sufficient access. For instance, to have good healthcare access, people who live in rural areas must also have, as follows (RHIhub, 2020):

- a. Financial methods to pay for services, such as health or dental insurance accepted by the provider.
- b. Means to reach and use services, such as transportation to services located at a distance, and the ability to take paid time off of work to use services. This point correlates with the critical opportunity that Thailand is trying to achieve by shortening the time between rural and urban areas to achieve a better healthcare quality.
- c. Confidence in their ability to communicate with healthcare providers, mainly if they are not fluent in the regions' language or have poor health literacy. This point correlates with the barriers in Cambodia's situation.

B. South-East Asia Region (SEAR)

Here are the challenges and how these five countries overcome the situation of the healthcare system which face each country (Weel C et al., 2016):

- a. Financial; the five countries spend <4% of their GDP on health. However, this investment is spent in an ineffective way that emphasises hospital and specialist provided rather than community-based services. This resulted in limited access and inequity to the healthcare system between remote and urban areas. These countries offer a coherent strategy to introduce community-based solid primary care with family medicine under UHC.
- b. Advocacy; there is an urgent need for advocacy of a robust primary healthcare function, where the WONCA-WHO partnership helps these countries to approach the governments by providing leadership for regional collaboration and engage with other stakeholders, such as inpatients or service users, professionals, policymakers, insurers and community leaders for health system change.

Notably, health insurance advocacy includes the funding that ensures primary healthcare for the poor and those in remote areas. Combining UHC and primary health strategy contributes to more significant equity and cost-effective care.

- c. Speciality training; speciality training establishment of general practitioners and other primary healthcare professionals by partnerships with universities and regional collaboration through fellowship. This point resulted in building the capacity and expertise demonstrated in the Primafamed project in Sub-Saharan Africa.

C. European Region (EUR)

The European Region has three major determinants comprising health systems, economic policy and social determinants of health. These determinants then to be examined how the policymakers can reduce the inequalities, as follows (Foster et al., 2016):

- a. Reforms in health policy include a provision to ensure Universal Health Coverage (UHC) and reforms that reduce barriers to accessing and utilising health services, as in lack of health literacy.
- b. Regarding economic policy, the regulation of labour markets and working conditions should provide individuals with healthy work. Further, it shows the urgent need for fiscal policy to improve people's jobs and income stability in vulnerable situations, especially those who live in remote areas.
- c. Public health policy should include the risk factors about health-related behaviour, such as regulating tobacco and alcohol consumption and targeting advertising and the sale of unhealthy foods.
- d. Improving the social determinants of health is critical for reducing health inequalities. The government reduces barriers in accessing education and putting redistributive measures to make societies more equitable.

Practices in developing gender equality and women's empowerment in constitutions across the world

A. Right to education

Interim National Constitution of the Republic of the Sudan, 2005

Article 44

- (1). Education is a right for every citizen, and the State shall provide access to education without discrimination as to religion, race, ethnicity, gender or disability.
- (2). Primary education is compulsory, and the State shall provide it free.

B. Right to health

Constitution of Ecuador, 2008

Article 35. Elderly persons, girls, children and adolescents, pregnant women, persons with disabilities, persons in prison and those who suffer from disastrous or highly complex diseases shall receive priority and specialized care in the public and private sectors. The same priority care shall be received by persons in situations of risk, victims of domestic and sexual violence, child mistreatment, natural or manmade disasters. The State shall provide special protection to persons who are doubly vulnerable.

Article 43. The State shall guarantee the rights of pregnant and breast-feeding women to: **2.** Free maternal healthcare services. **3.** Priority protection and care of their integral health and life during pregnancy, childbirth and postpartum. **4.** The facilities needed for their recovery after pregnancy and during breast-feeding.

C. Gender equality in work and economic opportunities

Constitution of Hungary, 2011

Article 58

- (1). Everyone shall possess the right to work.
- (2). In order to ensure the right to work, the state shall be charged with promoting:
 - a. The implementation of full-employment policies;
 - b. Equal opportunities in the choice of profession or type of work, and the conditions needed to avoid the gender-based preclusion or limitation of access to any position, work or professional category

D. Right to adequate housing

Constitution of South Africa, 1996

Article 26(1). Everyone has the right to have access to adequate housing, and (2) the State must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of this right.

E. Right to a life free from violence

Constitution of the Republic of Tunisia, 2014

Article 46. The state commits to protect women's accrued rights and work to strengthen and develop those rights. The state guarantees the equality of opportunities between women and men to have access to all levels of responsibility in all domains.... The state takes all necessary measures in order to eradicate violence against women.

ANNEX IV. ENVIRONMENTAL MAJOR IMPACTS IN KEY SECTOR PER COUNTRY

Countries	Major Impacts in Key Sector
Brunei Darussalam	<ul style="list-style-type: none"> • Increased sea temperatures have the potential to damage corals • Disruption on soil salinity and agricultural production due to delayed rainy season • Seawater intrusion could affect fisheries and damage coastal ecosystems, • Reduced rainfall affected on rain fed rice crop • In February and March, bushfires during dry periods can affect respiratory health • Possible impact on dengue spread
Cambodia	<ul style="list-style-type: none"> • In the SRES-A2 scenario, rainy season rice output might be reduced by up to 70%. • Dry-season rice and other dry-season crops might be reduced by up to 40%. • In the SRES-B1 scenario, overall crop yield is reduced by 20–60%. • Under the B1 and A2 scenarios, the majority of the lowland forest would be subjected to prolonged periods of drought. • Sea level rise will have an influence on coastal ecosystems, including wetlands loss, erosion, saltwater intrusion, and rising water tables; a one meter rise in sea level will flood 25,000 hectares of agricultural land. • Malaria transmission zone expansion in high and low emission scenarios
Indonesia	<ul style="list-style-type: none"> • Effects on the mangrove zone, as well as shrimp productivity • Coral bleaching has a big influence on the fisheries. • Coastal flooding has affected 42,000 hectares of land. • Coastal ecological destruction, loss of fishing zones, saltwater intrusion, forced coastal community displacement, damage to coastal infrastructure, and crop damage • Significant reductions in surface runoff and freshwater availability • Increased prevalence of dengue fever • Long dry seasons are affecting annual and perennial crops, resulting in a 32% reduction in agricultural productivity. • In the case of SLR+tides+wave+Land Subsidence (3.03–3.91) m, an economic loss of IDR 8,638 billion is expected. • Changes in insect occurrence patterns might have a significant influence on agricultural productivity.
Lao PDR	<ul style="list-style-type: none"> • Increased floods and droughts may wreak havoc on agriculture, particularly rice production. • Flooding has caused infrastructural damage. • The spread of infectious illnesses such as dengue fever has a negative influence on human health. • Transportation, communication, housing, and utilities are all expected to be impacted by flooding. • Rainfed agriculture productivity might be harmed by a delayed beginning of the monsoon. • Rainfall fluctuation from June to October can be a critical influence in the country's agricultural productivity.

Countries	Major Impacts in Key Sector
Malaysia	<ul style="list-style-type: none"> • Increased floods, as the average annual mean river flow is expected to rise by 36 percent by 2100, with maximum mean monthly river flows rising by 65 percent to 274 percent. • By 2040, there will be an increase in large dry periods with a recovery duration of more than ten years. • By 2100, a 34% increase in expected rainfall in Peninsular Malaysia might result in a shortening of the flood return period from 100 to 20 years. • A 0.36 m rise in sea level by 2100 might increase the risk of saltwater intrusion and coastal erosion. • Rice production might drop by 1 tonne per hectare if temperatures rise by 2°C. As a result, rice yields in Malaysia are expected to fall by -5.9% to -30.9 percent by 2050 in various sections of the nation, with the greatest drop in IADA Barat Laut Selangor (average of -30.5 percent) • Rice quality might be harmed by dry weather. • Because of the growth in the area from 68,531 ha to 384,275 ha (+460 percent) in 2050, oil palm will be vulnerable to flooding. • Rubber output has decreased by 10% as a result of dry periods and warming, particularly on the east coast. • Long dry spells can also have an impact on cattle health, dairy output, and fertility. • Increased sea surface temperature (SST) may have an impact on fish habitats, catches, and mangrove deterioration. • Forest species composition, habitat loss in mangrove forests, and forest flora and fauna, including orangutans, elephants, and marine ecosystems, may all be affected by climate change. • By 2050, the flood danger of relief centres is expected to grow by 70%, as is the increase in flooded regions and the flood risk of highways and other infrastructure. By 2050, sea-level rise may have an impact on ports and jetties. • By 2050, the number of electrical transmission towers under risk of flooding might rise from 1,666 to 2,208. • By 2050, there will be a 76% increase in flood risk to public health centers and a 9% increase due to sea-level rise; there will be an increase in the incidence of dengue and malaria, as well as other food and water-borne illnesses.
Myanmar	<ul style="list-style-type: none"> • Rainfall and temperature variations can have an impact on agriculture productivity, particularly rice. • Water shortages in reservoirs, both seasonal and year-round, can have an impact on agricultural and drinking water supplies in many parts of the country, particularly in the dry zone, which is under the most strain as a result of climate change. • Climate change may have an impact on the pace of groundwater recharge and the country's capacity to use groundwater sustainably. • Climate change is projected to result in a rise in water-related illnesses and heat stress diseases, as well as an increase in malaria outbreaks. • Climate change has an impact on both marine and freshwater habitats. • Floods and droughts, as well as rising temperatures, are likely to have an impact on forests and biodiversity, as well as forest fires. • Changes in SST can have an impact on the types of fisheries, populations, and fish harvests. • A major amount of Myanmar's biodiversity is threatened, and climate change will exacerbate the threat of extinction for these species.

Countries	Major Impacts in Key Sector
Philippines	<ul style="list-style-type: none"> • Tropical cyclones, droughts, floods, and rising temperatures are all expected to have a severe impact on agriculture productivity in the country. • Crop pest infestations may become more common if weather variability rises as a result of climate change. • Increasing water scarcity, high rainfall events, and floods may have an impact on the country's forests, biodiversity, and water resources, as well as the general productivity of watersheds. • Storm surges may have an impact on coastal communities and infrastructure, and coastal erosion can put millions of people in danger due to flooding and infrastructure damage. • Due to seawater intrusion, sea-level rise can influence groundwater aquifers in coastal locations, influencing coastal ecosystems, agriculture productivity, and drinking water supplies. • Infectious illnesses like malaria and dengue fever are likely to spread geographically.
Singapore	<ul style="list-style-type: none"> • Sea level rise — With nearly 30% of our island less than five metres above mean sea level, Singapore is vulnerable to sea level rise. With rising sea levels combined with storm surges and heavy rainfall, coastal regions are at risk of flooding. • Water resources — Singapore is water-scarce, in part due to limited land mass to serve as water catchment areas. Increased weather variability can impact our water supply resilience. For example, droughts can affect our water supply, while intense rainstorms can overwhelm our drainage capacity and result in flash floods. • The urban heat island effect — Urban temperatures in Singapore are set to rise significantly due to climate change. This is compounded by the Urban Heat Island (UHI) effect. Built-up areas are typically warmer than their surroundings because of reduced green cover, heat absorption by buildings, and heat emissions from transport and industry activities. Rising urban temperatures will impact health and urban liveability. • Food security – Extreme weather events (e.g. severe rainstorms and flash floods, prolonged droughts and heatwaves) and/or supply chain disruptions would have impact on Singapore's food security, as we now import over 90% of our food. • Public health — Rising temperatures and humidity could increase the risk of vector-borne diseases.
Thailand	<ul style="list-style-type: none"> • Long dry spells, falling rainfall, and an increase in severe rainfall events can all have an impact on agriculture productivity, especially for rainfed rice, sugarcane, cassava, maize, and rubber plantations. • Floods and droughts are predicted to damage the manufacturing and service sectors, particularly big industrial estates in the east and industries in the northeast. • Droughts are expected to hit the northeastern area, while floods are expected to hit the upper Chao Praya river basin, posing a threat to human settlements and industrial activity. • In terms of metropolitan regions, some places, such as the Bangkok region, have been highlighted as being more sensitive to flooding. • Malaria and dengue fever will become more prevalent as a result of climate change in numerous sections of the country. • Climate change is expected to have a significant impact on tourism since the country's beaches would be harmed by sea-level rise, coral bleaching, and human pressures; the southern sections of Thailand have been designated as the most susceptible places.

Countries	Major Impacts in Key Sector
Viet Nam	<ul style="list-style-type: none"> • Climate change can intensify salty water intrusion, hurting rice output, restricting coastal grazing and grasslands, diminishing breeding facilities, and worsening water quality for human and animal use. • Sea level rise, salty water intrusion, and coastal hazards can all have an impact on coastal biodiversity, coastal ecosystem degradation, beach erosion, coastal infrastructure deterioration, and coastal livelihoods such as agriculture, animal husbandry, and fisheries. • Floods and landslides are more likely in the northern mountain and central areas, and the central coast, south-central coast, Red River delta, and highlands may experience severe drought. • Forest fires can be sparked by extreme heat and dry weather, endangering forest biodiversity and affecting the distribution of dipterocarp, mangrove, and semi-deciduous forests. • Demand for groundwater extraction may increase, resulting in a decrease in groundwater availability, as well as changes in groundwater recharge characteristics of rainfall events as a whole. • Under typical conditions, spring rice yields might drop by 717 kg/ha, or 2.16 million tonnes; summer-autumn rice yields could drop by roughly 795 kg/ha; a longer summer monsoon season could have substantial repercussions for agricultural activities. • Crops like maize and soybean might see severe productivity drops, affecting food security, dairy feed supplies, and animal output. • Due to temperature and salinity impacts, as well as disease outbreaks, climate change affects fish productivity both inland and in the ocean, with an estimated loss of VND 855 billion to the fishing industry by 2050. • Climate change, the threat of infectious disease transmission, and food-borne illnesses from contaminated fisheries all threaten the health and food security of millions of people in the nation.

ANNEX V. LIST OF PARTICIPANTS IN FGDS AND INTERVIEWS

A. ASEAN Member States

Title	Full Name	Country	Ministry / Agency / Body	Designation
Dr	Lubna binti Haji Abdul Razak	Brunei Darussalam	Ministry of Health / Senior Officials Meeting on Health Development (SOMHD)	Research Officer
Ms	Nurul Aziemah binti Haji Morni	Brunei Darussalam	Ministry in-charge for social welfare and social protection / SOMSWD	Senior Instructor
Mr	Ir. Hj Mohamad	Brunei Darussalam	Lead Implementing Body for Sustainable Infrastructure (LIB-SI)	Senior Executive Engineer
Ms	Ir.Helda Wati bte Abd Hamid	Brunei Darussalam	Lead Implementing Body for Sustainable Infrastructure (LIB-SI)	Engineer
Ms	Adeline Goh	Brunei Darussalam	Lead Implementing Body for Sustainable Infrastructure (LIB-SI)	Special Duty Officer
Ms	Siti Noor Hazimah Haji Zainal	Brunei Darussalam	Department of Labour, Ministry of Home Affairs	Assistant Commissioner of Labour
Miss	Dk Khairah Wadhihah binti Pg Hj Zainurin	Brunei Darussalam	Ministry in-charge for social welfare and social protection / SOMSWD	Social Work Officer
Mr	Abdul Rahman bin Haji Ahmad	Brunei Darussalam	Ministry in-charge for social welfare and social protection / SOMSWD	Assistant Community Development Officer
Ms	Nur Hafizah binti Haji Mohammad Saini	Brunei Darussalam	Ministry of Culture, Youth and Sports	Community Development Officer
Ms	Noridah Haji ishak	Brunei Darussalam	Ministry of women's affairs / ASEAN Committee on Women (ACW)	Community Development Officer
Hj	NOR HASMA HAJI HASHIM	Brunei Darussalam	MCYS	Community Development Officer
Ms	Chinneth CHENG	Cambodia	Ministry of women's affairs / ASEAN Committee on Women (ACW)	Director of Gender Equality Department
H.E Ms	Thoeun Sarkmarkna	Cambodia	Ministry of women's affairs / ASEAN Committee on Women (ACW)	ACWC
Mr	Chiv Ratha	Cambodia	Ministry of Youth / Senior Officials on Youth (SOMY)	Leader
Ms	Him Somony	Cambodia	Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE)	Deputy Director

Title	Full Name	Country	Ministry / Agency / Body	Designation
Ms	Khankeo KEOMAYPHITH	Lao PDR	Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE)	Delegate
Ms	Salina binti Muhamad Sali Luddin	Malaysia	Senior Labour Officials Meeting (SLOM)	Senior Principal Assistant Secretary, ASEAN Unit, International Division, Ministry of Human Resources, Malaysia
Mr	Muhammad Syamsul Hazry bin Yahya	Malaysia	Senior Labour Officials Meeting (SLOM)	Senior Assistant Secretary, ASEAN Unit, International Division, Ministry of Human Resources, Malaysia
Mr	PATHMANATHAN R. NALASAMY	Malaysia	Ministry in-charge for social welfare and social protection / SOMSWD	PRINCIPAL SENIOR ASSISTANT DIRECTOR
Ms	Gemma Lorena A. Reyes	Philippines	Ministry of Education / Senior Officials Meeting on Education (SOM-ED)	Supervising TESD Specialist, Technical Education and Skills Development Authority (TESDA)
Ms	Yasmin Ann I. Pimentel	Philippines	Technical Education and Skills Development Authority (TESDA)	Senior TESD Specialist
Mr	Ken Piczon Sarmiento	Philippines	Philippine Overseas Employment Administration - Labour Sector	OIC-Director II
Ms	Avery Silk Arevalo	Philippines	Ministry of women's affairs / ASEAN Committee on Women (ACW)	Senior Gender and Development Specialist
Mr	Arnold Janssen D. Saragena	Philippines	Department of Labour and Employment	Senior Labour and Employment Officer
Mr	Julius Carlo Hilado	Philippines	Ministry of Planning	Senior Economic Development Specialist
Ms	Jasmine Angelou Mae C. Cabebe	Philippines	Philippine Overseas Employment Administration	Planning Officer III
Ms	Maria Teresa S. Alambra	Philippines	Ministry of Planning	Chief Economic Development Specialist
Mr	Michael Provido	Philippines	Ministry of Planning	Chief Economic Development Specialist
Ms	EVELYN C. TANDAYU	Philippines	Department of Labour and Employment	OIC-Division Chief, Environment Control Division
Ms	Aretha Janin O. Garcia	Philippines	Ministry of Planning	Senior Economic Development Specialist

Title	Full Name	Country	Ministry / Agency / Body	Designation
Ms	Miraluna S. Tacadao	Philippines	Institute for Labour Studies - Dept. of Labour & Employment	Chief LEO
Ms	Leonila G. Cajarte	Philippines	Ministry of Planning	Assistant Regional Director
Mr	Stephen I. Cezar	Philippines	Ministry of Education / Senior Officials Meeting on Education (SOM-ED)	Supervising TESD Specialist
Ms	Malorie Joy Mones	Philippines	Institute for Labour Studies - Department of Labour and Employment	Senior Officer
Ms	WILMA TOMADA BATHAN	Philippines	Ministry of Education / Senior Officials Meeting on Education (SOM-ED)	TESD Specialist, Focal Person
Ms	Katherine Balino Paredes	Philippines	TESDA	Project Staff
Ms	Lalaine M. Sajelan	Philippines	National Economic and Development Authority Regional Office XI	Chief Economic Development Specialist
Ms	Jan Danielle R. Bondad	Philippines	SLOM / ACMW	Labour and Employment Officer III
Mr	Ramon Paul Falcon	Philippines	Ministry of Planning	Chief Economic Devt Specialist
Dr.	Riza C. Gusano	Philippines	Ministry of Education / Senior Officials Meeting on Education (SOM-ED)	Supervising Education Programme Specialist
Mr	Anastacio M. Lagumbay Jr.	Philippines	Ministry of women's affairs / ASEAN Committee on Women (ACW)	Gender and Development Specialist
Ms	Emer Janette P. Bamba	Philippines	Department of Labour And Employment - Overseas Workers Welfare Administration	Supervising Welfare Officer
Ms	Liezl Joyce V. Mangalindan	Philippines	Ministry of Planning	Economic Development Specialist I
Dr.	Jiraroth Sukolrat	Thailand	Ministry of Transport / Office of Transport and Traffic Policy and Planning (OTP)	Director, Bureau of Regional Transport and Traffic System Promotion
Ms	Vasinee Visoottiviseth	Thailand	Ministry of interior	Senior professional Architect
Mr	Yoga Sidharta	Indonesia	Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE)	Assistant Deputy Director for Bilateral Cooperation
Mr	Budi Cipta Perdana	Indonesia	Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE)	Bilateral and Regional Cooperation Analyst

Title	Full Name	Country	Ministry / Agency / Body	Designation
Dr	Zarni Minn	Myanmar	Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE)	Director
Mr	Pichchakriya OL	Cambodia	Ministry of Labour and Vocational Training	Labour and Vocational Training
Mr	Khamphouvong KHAMVENE	Lao PDR	Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE)	Delegate
FDG	Thu Zar Win	Myanmar	Lead Implementing Body for Sustainable Infrastructure (LIB-SI)	Assistant Director
Mr	OUK Samonn	Cambodia	Ministry of Labour and Vocational Training	Director of Customer Services and Public Relations Department
FDG	kyaw Myo Htut	Myanmar	Lead Implementing Body for Sustainable Infrastructure (LIB-SI)	chief engineer
Mrs	Suttapak Panpapai	Thailand	Senior Officials Meeting on Rural Development and Poverty Eradication (SOMRDPE)	Foreign Relations officer, professional Level
H.E Mr	Som Chamnan	Cambodia	Ministry of Labour and Vocational Training	Under-Secretary of State
Mr	Chao Yang	Lao PDR	Ministry of Transportation / Senior Transport Officials Meeting (STOM)	Officer, LIB-SI representatives

B. Think Tanks, Research Institutes, and Study Centers

Title	Full Name	Organisation	Position
Prof. dr.	Ronald L. Holzhaecker	SEA-ASEAN. Groningen Research Centre for Southeast Asia and ASEAN.	Director
Ms	Melinda Martinus	ISEAS	Researcher
Dr.	Arisman	Center for Southeast Asian Studies (CSEAS), Indonesia	Executive Director
Dr.	Maria Esterlita V. Uy	National Institutes of Health, University of the Philippines Manila	Institute Director of the Institute of Child Health and Human Development, Research Associate Professor
Dr. phil	Vissia Ita Yulianto	Center for Southeast Asian Social Studies, UGM	Researcher
Dr.	NOEL CHRISTIAN A. MORATILLA	University of the Philippines	Assistant Professor, Asian Center; Deputy Director, Office of International Linkages
N/A	Brent Ivan Andres	Center for Energy, Ecology, and Development	Energy and Environment Policy Analyst
Mr.	Apichai Sunchindah	Independent Expert	Development Specialist

Title	Full Name	Organisation	Position
Mrs	Lolita Moorena	J-PAL SEA	Senior Policy Manager
Dr.	Nguyen Phu Hung, Deputy Director of SRD	Center for Sustainable Rural Development	Deputy Director of SRD
Ms.	Ms. Marlene D. Ramirez	AsiaDHRRA	

C. Multilateral and International Organisations

Title	Full Name	Organisation	Position
Ms	Patricia Ongpin	The Joint United Nations Programme on HIV/AIDS (UNAIDS)	Regional Fast Track Advisor
Dr	Ye Yu SHWE	The Joint United Nations Programme on HIV/AIDS (UNAIDS)	Technical Officer
Mr	Taoufik Bakkali	The Joint United Nations Programme on HIV/AIDS (UNAIDS)	Regional Director,
Mr	Rwodzi	The Joint United Nations Programme on HIV/AIDS (UNAIDS)	Data analyst
Mr.	Joris van Etten	Asian Development Bank (ADB)	Senior Urban Development Specialist
Ms	Wassana Im-em	United Nations Population Fund (UNFPA)	Technical Specialist on Population and Development
Mr.	Tam Viet Hoang	United Nations Human Settlement Programme (UN-Habitat)	Sustainable Urbanisation Specialist
Dr	Sue Vize	United Nations Educational, Scientific and Cultural Organisation (UNESCO)	Regional Adviser for Social Sciences
Ms.	Nansiri Iamsuk	United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)	Programme Specialist
Ms	Saranya Chittangwong	United Nations Entity for Gender Equality and the Empowerment of Women (UN Women)	Programme Coordinator

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