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RAISING THE BAR ON ASIAN WOMEN'S SRHR IN THE AGE OF CLIMATE CHANGE

2018

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PREFACE

The United Nations High-level Political Forum on Sustainable Development (HLPF) is the mandated platform where member states deliberate, follow-up, and review their progress on the 2030 Agenda for Sustainable Development, and in particular, the Sustainable Development Goals (SDGs).¹ The follow-up and review mechanisms of the Forum encourages states to voluntarily conduct regular and inclusive reviews of progress at the national and sub-national levels, which are country-led and country-driven.² The outputs in the form of voluntary national reviews (VNRs) serve to strengthen policies and public institutions, and to mobilise multi-stakeholders support and partnership to achieve the 2030 Agenda, as well as facilitate the sharing of experiences in terms of successes, challenges, and lessons learned.³

Since 2017, the Forum focuses on reviewing selected goals every year. This year, the goals that are being reviewed are Goals 6 (clean water and sanitation), 7 (affordable and clean energy), 11 (sustainable cities and communities), 12 (responsible consumption and production), and 15 (life on land), which will be expounded in this brief under the overarching theme of "Transformation Towards Sustainable and Resilient Societies." Forty-seven countries will be conducting VNRs, of which five are from Asia (Bhutan, Lao PDR, Singapore, Sri Lanka, and Vietnam).

The initiative by the HLPF to focus on specific goals for follow-up and review is welcome. However, despite the call that no one should be left behind, the emphasis the process places on women and girls is doubtful as the SDGs reviewed do not take into consideration the impact on gender equality and sexual and reproductive health and rights (SRHR)—a crucial intervention to ensure gender equality. Though gender equality and SRHR are frequently missed out, the SDGs reviewed are interlinked closely with these issues, especially in this age of climate change. The ground realities in Asia provide ample evidence for the interlinkages between these goals with the SRHR and gender-related goals: Goals 3 (health and well-being) and 5 (gender equality).

We hope that this brief will provide awareness and insight to a wider audience and advocates on the nexus between the SDGs reviewed, women's SRHR, and climate change in Asia. It is hoped that this brief will add value to current global SRHR advocacy and discourse at the coming HLPF in New York.

The inclusion of women's SRHR within climate change discourse, policies, strategies, programming, and financing is long overdue. Coherence between the 2030 Agenda and the Paris Agreement is of vital importance. Coherence has been much talked about and documented in negotiations outcome documents and national documents. The talk must now lead to concrete action, particularly to make a difference to women and girls living in the most marginalised and vulnerable communities who bear the double burden of gender inequality and climate change. This is essential if we are committed to achieving sustainable and resilient societies in which no woman or girl is left behind.

Sivananthi Thanenthiran

Executive Director

PURPOSE OF THE ADVOCACY BRIEF

With the theme "Transformation Towards Sustainable and Resilient Societies," the 2018 High-level Political Forum on Sustainable Development (HLPF) will focus on the review of the following sustainable development goals (SDGs):

- Goal 6: Ensure availability and sustainable management of water and sanitation for all;
- Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all;
- Goal 11: Make cities and human settlements inclusive, safe, resilient, and sustainable:
- Goal 12: Ensure sustainable consumption and production patterns; and
- Goal 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

These are in addition to Goal 17: Strengthen the means of implementation and revitalise the global partnership for sustainable development, which is reviewed annually.

This advocacy brief aims to look at how the above issues under review affect women's health, in particular, their sexual and reproductive health and rights (SRHR), in Asia within the context of climate change. This will be done through an assessment of the five SDGs under review in 2018.

The brief will provide an overview of the situation in Asia and the results from the recent Asia-Pacific Forum on Sustainable Development (APFSD). The APFSD provides the platform for countries in the Asia and the Pacific region to review their progress on the SDGs and collectively work together to

achieve the 2030 Agenda. For each goal, the narrative will cover: (i) information and issues pertaining to women's health, particularly their SRHR, related to the goal; (ii) the interlinkages between the particular goal and Goals 3 (good health and well-being) and 5 (gender equality); (iii) gaps and challenges identified that will have impact on women's health, particularly their SRHR; and (iv) recommendations that will contribute to improving women's health, in particular their SRHR. For Goal 17 (partnership for the goals), which is a cross-cutting goal that applies to all of the SDGs, recommendations will be made to strengthen the means of implementation in the areas of finance, technology, capacity building, trade, and systemic issues.

Four countries (Bhutan, Lao PDR, Sri Lanka, and Vietnam)⁷ are submitting their voluntary national reviews (VNRs) for this round of HLPF from the Asia-Pacific region. As such, this brief will as much as possible cite data and examples from these four countries.⁸

This brief is for the local and regional civil society organisations (CSOs) to use in advocating for inclusion of women's health, particularly their SRHR, into national policies, strategies, programme, and financing with local and national governments respectively. Additionally, regional and international CSOs can use this brief to advocate for inclusion of women's health, in particular, their SRHR, to representatives of member states, donors, negotiators at United Nations (UN) spaces, UN agencies, and the climate change financial mechanisms in the context of coherence on climate resilience and sustainable development.

GLOSSARY OF TERMS

CLIMATE CHANGE

ADAPTATION: The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as the "process of adjustments to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects."i Adaptation decreases vulnerability and increases resilience to impacts. It includes building the adaptive capacity of people and communities to adapt to climate change, and implementing adaptation decisions (e.g., transforming that capacity into action). Local, state, and national level adaptation planning can limit the damage caused by climate change and prevent the long-term costs of responding to climate-related impacts. It is foreseen that there will be an increase in frequency and intensity in the coming decades.iii, iv

CLIMATE CHANGE: The Intergovernmental Panel on Climate Change (IPCC) defines climate change as a "change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer." It may be due to "natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use." The "effects include higher global temperatures and increase in frequency and intensity of extreme weather events and related natural disasters, as well as threatened sustainability of ecosystems." Vii

EXTREME WEATHER EVENT/EXTREME CLIMATE EVENT:

An extreme weather event is defined by the IPCC as "an event that is rare at a particular place and time of year."viii However, "the characteristics of what is called extreme weather may vary from place to place in an absolute sense. When a pattern of extreme weather persists for some time, such as a season, it may be classed as an extreme climate event, especially if it yields an average or total that is itself extreme (e.g., drought or heavy rainfall over a season)."ix As well, weather or climate events, even if not extreme in a statistical sense, can still lead to extreme conditions or impacts, either by crossing a critical threshold in a social, ecological, or physical system, or by occurring simultaneously with other events. A weather system such as tropical cyclone can have an extreme impact, depending on where and when it approaches landfall, even if the specific cyclone is not extreme relative to other tropical cyclones.

Conversely, not all extremes necessarily lead to serious impacts. $\!\!^{\scriptscriptstyle X}$

MITIGATION: Mitigation refers to actions to reduce or prevent greenhouse gas (GHG) emissions. Mitigation efforts range from the use of new and renewable technologies, developing energy efficient technologies, or changing management practices and/or consumer behaviour. Mitigation actions can take place at many levels, from costly to less expensive interventions that range from the protection of coastal areas, developing better urban infrastructure, protection of forests and ecosystems, to improving cook stove design. xi

RESILIENCE: "The capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance by responding or reorganising in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation."xii

VULNERABILITY: It is defined as the "propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and limited capacity to cope and adapt."xiii It is determined by "physical, social, economic, and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards."xiv

SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS

REPRODUCTIVE HEALTH: "Reproductive health implies that people are able to have a responsible, satisfying, and safe sex life, and that they have the capacity to reproduce and the freedom to decide if, when, and how often to do so. Implicit in this are the rights of all persons to be informed of and have access to safe, effective, affordable, and acceptable methods of fertility regulation of their choice, and to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant."xv

REPRODUCTIVE RIGHTS: "Reproductive rights embrace certain human rights that are already recognised in national laws, international human rights documents, and other

GLOSSARY OF TERMS

consensus documents. These rights rest on the recognition of the basic right of all couples and individuals to decide freely and responsibly the number, spacing, and timing of their children and to have the information and means to do so, and the right to attain the highest standard of sexual and reproductive health. These also include their right to make decisions concerning reproduction free of discrimination, coercion, and violence, as expressed in human rights documents."xvi

SEXUAL HEALTH: Sexual health implies a positive approach to human sexuality. The purpose of sexual healthcare is the "enhancement of life and personal relations, as well as counselling and care related to reproduction and sexually transmitted diseases."xvii

SEXUAL RIGHTS: "Sexual rights embrace human rights that are already recognised in national laws, international human rights documents, and other consensus documents. These include the right of all persons, free of coercion, discrimination, and violence, to:

- the highest attainable standard of health in relation to sexuality, including access to sexual and reproductive healthcare services;
- seek, receive, and impart information in relation to sexuality:
- sexuality education;
- respect for bodily integrity;
- choice of partner;
- decision to be sexually active or not;
- consensual sexual relations;
- consensual marriage;
- decide whether or not, and when to have children; and
- pursue a satisfying, safe, and pleasurable sexual life."xviii

UNIVERSAL ACCESS: Despite its wide acceptance as an objective of health systems, the term universal access lacks a clear definition. A commonly used definition of universal access in relation to reproductive health is that information and services are "available, accessible, and acceptable" to meet the different needs of all individuals.xix The limitation of this definition is the tautological inclusion of the word "access" in the definition of access, which renders it logically untenable. In its broadest sense, universal access implies "the ability of those who need healthcare to obtain it."xx It has also been defined as "the absence of geographic, financial, organisational, socio-cultural, and gender-based barriers to care."xxi

Sources:

- IPCC, "Annex II: Glossary," in Climate Change 2014: Synthesis Report; Contribution of Working Group I, II, and III to the Fifth Assessment Report of the IPCC, eds. K. J. Mach, S. Planton, and C. von Stechow (Cambridge: Cambridge University Press, 2014), 118.
- W. Neil Adger, Nigel W. Arnell, and Emma L. Tomkins, "Successful Adaptation to Climate Change Across Scales," Global Environment Change 15, Issue 2 (July 2005): 78, accessed September 20, 2016, https://doi.org/10.1016/j.gloenvcha.2004.12.005.
- The Pew Center on Global Climate Change and the Pew Center on the States, Climate Change 101: Adaptation (Arlington, V.A. and Washington D.C.: Pew Charitable Trusts, 2008), 1, accessed March 3, 2016, http:// www.pewtrusts.org/en/research-and-analysis/reports/2008/02/25/ climate-change-101-adaptation.
- ARROW, Identifying Opportunities for Action on Climate Change and Sexual and Reproductive Health and Rights in Bangladesh, Indonesia, and the Philippines (Kuala Lumpur: ARROW, 2014), 4, accessed March 3, 2018, http://arrow.org.my/wp-content/uploads/2015/04/Climate-Change-and-SRHR-Scoping-Study_Working-Paper_2014.pdf.
- IPCC, "Glossary," 120. IPCC, "Glossary," 120. vi.
- Eleanor Blomstrom et al., Climate Change Connections: A Resource Kit on Climate, Population and Gender (New York: UNFPA & WEDO, 2009), 1, accessed March 3, 2016, https://www.unfpa.org/public/publications/ pid/4028.
- viii. IPCC, "Glossary," 123.
- IPCC, "Glossary," 123.
- Sonia I. Seneviratne et al., "Changes in Climate Extremes and Their Impacts on the Natural Physical Environment," in Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation: A Special Report of Working Groups I and II of the IPPC, eds. C. B. Field, et al. (Cambridge: Cambridge University Press, 2012), 116-117.
- ARROW, Identifying Opportunities, 5.
- xii. IPCC, "Glossary," 127. xiii. IPCC, "Glossary," 128.
- xiv. United Nations Office for Disaster Risk Reduction (UNISDR), "Vulnerability," PreventionWeb, accessed March 22, 2018, https://www. preventionweb.net/english/professional/terminology/v.php?id=508.
- UNFPA, International Conference on Population and Development Programme of Action; Adopted at the International Conference on Population and Development, Cairo, 5-13 September 1994 (New York: UNFPA, 1994), 45.
- xvi. UNFPA, ICPD, 46.
- xvii. UNFPA, ICPD, 46.
- xviii. "Gender and Human Rights," World Health Organization, accessed June 21, 2018, http://www.who.int/reproductivehealth/topics/gender_rights/ sexual health/en/.
- UNFPA, A Report of the Conference on Advocating for Universal Access to Reproductive Health Services and Commodity Security, 28-30 July 2009, Kathmandu, Nepal (Bangkok: UNFPA, 2009), 9, accessed March 14, 2012, http://asiapacific.unfpa.org/sites/default/files/pub-pdf/RHCS.
- World Health Organization, National-level Monitoring of the Achievement of Universal Access to Reproductive Health: Conceptual and Practical Considerations and Related Indicators; Report of a WHO/UNFPA Consultation, 13-15 March 2007 (Geneva: WHO, 2007), 4, accessed March 15, 2012, http://apps.who.int/iris/bitstream/ handle/10665/43920/9789241596831_eng.pdf;jsessionid=8066C174CC6 4DC988DEEF443BF5D7027?sequence=1.
- xxi. Pan American Health Organization, Renewing Primary Health Care in the Americas: A Position Paper of the Pan American Health Organization/ World Health Organization (PAHO/WHO) (Washington D.C.: PAHO, 2007), 12, accessed March 15, 2012, http://apps.who.int/medicinedocs/ documents/s19055en/s19055en.pdf.

INTRODUCTION

Regional Context

Asia is vast and diverse; it spans 51 countries within 6 subregions. In recent years, the key areas of concern within this region are demographic changes, particularly related to a large youth population, rural-urban migration, and climate change.

In 2015, the youth population (those aged 15-24 years) in Asia was about 718 million.10 This comprises about 60% of the world's youth population, thus making Asia the home to the largest youth population in the world. It is projected that Asia will continue to have the largest youth population until 2080.11 The challenges faced by many Asian countries are mainly related to inadequate investment in young people's health, education, and human capital, which then prevents them from contributing to their countries' social and economic development, as well as taking full opportunity of the demographic dividend.¹² Meanwhile, young people face a myriad of issues: high prevalence of HIV and AIDS; child marriage; early/unintended pregnancies; female genital mutilation and other harmful traditional practices; lack of access to affordable and quality medicines and health services, including for SRHR; malnutrition; a lack of youth and youthresponsive policies; and religious extremism.13

Rural-urban migration is another key concern in the region. The percentage of population living in urban areas in Asia has increased from 34.9% in 2000 to 43.5% in 2010, with a projection that it will increase to 55.3% in 2030. Ha Rural-urban migration is mainly caused by either permanent displacement from the hinterland, circular temporary migration, or commuting. Rapid economic growth in urban areas offers diverse employment opportunities, better salaries, and better access to services, entertainment, and infrastructure. However, rapid urban migration also creates distinct problems, such as environmental degradation, overcrowding and slums, urban poverty, increasing inequality, and "some degree of social tension and crime." 16

The third concern, climate change, is also an equally pressing concern in Asia as many of the countries in the region are experiencing the adverse effects of climate change. To example, the low-lying deltas, which are the sites of large growing cities in South Asia, Southeast Asia, and East Asia, are highly prone to flooding. Tropical cyclones hit the region hard—90% of the global population exposed to tropical

cyclones live in Asia.¹⁹ In addition, since 2015, many developing countries in Asia have experienced the impact of the El Niño,²⁰ which is entering an unpredictable phase.²¹ Water scarcity will be a major issue in many Asian regions due to increased water demand by the population, particularly the growing middle-class population, as a result of more frequent and intense drought.²²

As countries in Asia strive to achieve the 17 SDGs, they need to take into consideration these key concerns: rapid growth in youth population, rural-urban migration, and climate change. If not addressed, these concerns will hamper countries' progress on the 2030 Agenda for Sustainable Development.

Global and Regional Platforms for Follow-up and Review

The HLPF 2018 will be held in July this year in New York. It marks the third round of global follow-up and review on the progress made by governments towards their commitments to the 2030 Agenda for Sustainable Development.

Prior to the HLPF event in July, each region would hold a regional forum where member states come together to discuss/review the progress of the reviewed goals from the regional perspectives. In the Asia-Pacific region, the UN Economic and Social Commission for Asia and the Pacific (UNESCAP) organised the Fifth Asia-Pacific Forum on Sustainable Development in Bangkok on March 28-30, 2018 for this purpose.

At the APFSD, the discussion focused on what "resilient" meant from the Asia-Pacific perspectives. From the official APFSD report, "resilient" is viewed in terms of strengthening resilience to economic shocks and strengthening resilience to natural disasters, as well as climate change response, and building resilient communities in areas vulnerable to climate change.²³ In addition, efforts to strengthen resilience must be done through "social inclusion, health, education, housing, nutrition and food security, water and sanitation strategies, and awareness programmes."²⁴

On the other hand, civil society representatives, in their People's Forum Statement for APFSD, provided a more comprehensive definition of "resilience," incorporating the elements of development justice, as well as international principles and standards on human and gender rights.²⁵ The full definition is as follows:

Resilience must be redefined in the light of increased vulnerability of rural and urban communities due to poverty and human rights violations by state and non-state actors and in light of women, indigenous people, and local and poor communities dependent on natural resources who are witnessing complete erosion of their livelihoods and habitat and violation of their rights to their lands and territories. Resilience depends also on the extent of real consultation and participation of people in planning, development, and deployment of technology and is hampered by lack of recognition of the local and traditional knowledge of indigenous peoples and local communities, including women and other marginalised groups, who are also agents of change. Resilience needs to take into consideration unequal power structures at the global and regional levels in aid and trade policies, which increasingly favour big and powerful countries and multinational corporations at the expense of the people. Increasing resilience requires integration of women's rights and human rights and must provide space for environmental defenders, many of who are being targeted for their exemplary commitments to the people and the planet. Resilience of migrants is celebrated but denies the reality that this resilience is actually forcing migrants to endure conditions of exploitation. Resilience also depends on polycentric government to ensure broader participation of stakeholders and right holders and acknowledging the complex adaptive systems that accepts the importance of both scientific as well as traditional and local knowledge.26

The 5th APFSD report²⁷ includes the discussion and recommendations on the five SDGs being reviewed this year by the member states and major groups and other stakeholders, which will be further discussed at the HLPF in New York. Below are the key recommendations from the report that have elements of development justice and international principles and standards on human and gender rights across these goals.

In summary, the APFSD report notes that for Goal 6, some progress was made; however, accelerated efforts are needed across sectors—especially focusing on women, children, and poor people—to achieve this goal. There is a need to actively promote good practices such as raising awareness and promoting clean water and sanitation corresponding to human rights and human health.

For Goal 7, additional efforts and collaboration by all stakeholders (governments, the private sector, and civil society) are needed. There is an urgent need to set up national targets for clean cooking fuels and technologies, and the "issues of clean cooking and the development of renewable energy sources must be better integrated into energy policy frameworks." Essentially, energy policies must respond to the needs of the local communities, stimulate sustainable energy projects, and energy efficiency measures. The latter is urgently needed in social and public services (transport, industry and building sectors). The Forum also acknowledged the "close linkages between water, food, and energy required a suitable integrated approach to ensuring water and food security, sustainable agriculture, and energy production." 29

Resilience must be redefined in the light of increased vulnerability of rural and urban communities due to poverty and human rights violations by state and non-state actors and in light of women, indigenous people, and local and poor communities dependent on natural resources who are witnessing complete erosion of their livelihoods and habitat and violation of their rights to their lands and territories.

As for Goal 11, accelerated progress is needed and this could be achieved by strengthening the social dimensions in making cities and human settlements inclusive. In this aspect, the local communities, particularly the urban poor, need to be empowered to actively engage in the development of their informal settlements so that no one will be left behind in the cities.³⁰ Also, local governments and urban communities ought to document good and innovative practices in their settlements and disseminate them via South-South platforms for the purpose of knowledge sharing and possible replication.³¹

With regard to Goal 12, there is a call for member states to move towards an integrated and inclusive circular economic approach. One way to realise this is through strengthening their statistical capacity, that is investing in frameworks and databases that consider the economic, environmental, and social aspects, for evidence-based policy-making.³² The multistakeholder networks need to be strengthened, especially with regard to engaging the civil society.

For Goal 15, very little progress was made to protect the forest and to reduce the degradation of natural habitats.³³ There is a need to strengthen governance and effective laws to promote participation related to land tenure, rights of indigenous peoples and environmental defenders, ecosystem-based management, social impact assessments, and the intrinsic rights of nature.³⁴ There is also a need to engage the local communities and indigenous peoples, and to take into account indigenous and traditional knowledge. An integrated approach is required between this Goal and other related goals, while taking into consideration the synergies and trade-offs of these goals, to achieve sustainable development.

The report also detailed key points underscored by the major groups and other stakeholders, such as the need for an integrated approach to SDG implementation in view of the interlinkages between other goals; the indivisibility of human rights; active participation and involvement of grass-roots and unrepresented communities, and groups at risk; and calling for communities, especially women to be keepers of natural resources.

The 5th APFSD report also contains the assessment of the interlinkages among the SDGs. Some of the high points are: firstly, the member states regard sustainable forest management as the means to achieve Goals 1, 2, 3, 5, and 7 and believe that the young people play an important role here;35 secondly, the need to enhance inclusiveness and mainstreaming the SDGs into budget processes, policies, and strategic actions, particularly in addressing rapid urbanisation, access to basic services, and "development of future growth centres;"36 and thirdly, promoting sustainable food management and consumption patterns, sustainable forest management, and climate change mitigation and adaptation. Asia-Pacific member states recognise that small-scale farmers play an important role in the food system, as well as in the energy and water sectors.³⁷ Therefore, the rights of these farmers, including some who are indigenous peoples and women, must be upheld as states undertake the transformation towards sustainable and resilient societies. Furthermore, the report also detailed key points underscored by the major groups and other stakeholders, such as the need for an integrated approach to SDG implementation in view of the interlinkages between other goals; the indivisibility of human

rights; active participation and involvement of grass-roots and unrepresented communities, and groups at risk; and calling for communities, especially women to be keepers of natural resources. The stakeholders also called for more investment in public services as basic human rights, particularly public health care services.³⁸

Importantly, the member states acknowledged that the active participation of civil society, youth, women, vulnerable groups, and businesses is critical, hence their capacity need to be built.

Progress of the regional road map for implementing the 2030 Agenda was also reviewed and recorded in the 5th APFSD report. This road map was adopted in 2017 at the 4th APFSD. The member states underlined that the key gap is statistical capacity, thus investments are needed to meet the commitment of disaggregated data for evidence-based policy making. This led to the major groups and other stakeholders calling for the scaling-up of community-based data collection.³⁹ There is a call for member states to strengthen their partnership in climate change, food security, goal indicator framework, energy, infrastructure, labour mobility, technology, knowledge sharing, financial integration, and macroeconomic cooperation.40 Importantly, the member states acknowledged that the active participation of civil society, youth, women, vulnerable groups, and businesses is critical, hence their capacity need to be built.41 The major groups and other stakeholders pointed out that with regard to the means of implementation, there is lack of promotion of human rights standards, including whistleblower protection, and structural barriers still persist.

THE SDGS UNDER REVIEW, CLIMATE CHANGE, AND WOMEN'S SRHR IN ASIA

In the following section, Goals 6, 7, 11, 12, and 15 will be examined separately. Each goal will be analysed from the context of climate change and women's health, particularly SRHR. This is because transformation towards sustainable and resilient societies in Asia cannot be achieved without taking into consideration climate change.⁴² Moreover, while climate change affects everyone, it is not gender-neutral. Women, regardless of age, are disproportionately affected compared to men. In Asia, women—including girls, women with disability, and the elderly—are the most vulnerable populations to extreme weather events.⁴³ This is true when it comes to their health, particularly their SRHR.

The Paris Agreement⁴⁴ on climate change underscored in its preamble that states must be committed to "respect, promote and consider... the right to health...," in their respective climate actions.45 However, states often do not consider women's health, particularly their SRHR, in their climate change policies, strategies, programming, and budgeting. With climate change in the equation, the pursuit of universal access to health, including SRHR (related to SDG 3 and SDG 5), will become more challenging for women and girls. Aside from directly affecting their health, including SRHR, climate change also exacerbates the existing situation of women and girls-gender inequality, unequal bargaining power, poverty, household workload, and lack of access to education, health services, information, and job opportunities-which would then affect their health, well-being, and life's potential.⁴⁶ In the absence of good health and protection to their SRHR, women and girls would be unable to engage effectively and actively, be it economically, socially, politically, and culturally to address climate change.⁴⁷ Neither will they be able to contribute to building sustainable and resilient societies.

Aside from directly affecting their health, including SRHR, climate change also exacerbates the existing situation of women and girls—gender inequality, unequal bargaining power, poverty, household workload, and lack of access to education, health services, information, and job opportunities—which would then affect their health, well-being, and life's potential.

Women's Health, Particularly SRHR, in the Context of Climate Change for Goal 6: Ensure Availability and Sustainable Management of Water and Sanitation for All

GOAL INFORMATION

Of the four Asian countries under review, higher percentages of population in the urban areas have basic sanitation services⁴⁸ compared to those in the rural areas, except for Sri Lanka (see Table 1). Generally, this is expected since urban areas are more developed than rural areas. A high proportion of urban and rural populations have basic sanitation services, except for Bhutan's rural population; however, this service is only the minimum standard for sanitation. Countries should not be content with just providing basic sanitation services and instead should strive to provide the population—both rural and urban—with improved and safely managed sanitation facilities.^{49,50}

TABLE 1: BASIC SANITATION SERVICE			
Country	Proportion of Population with Basic Sanitation Service (%)		
Bhutan	57	72	
Lao PDR	60	93	
Sri Lanka	95	89	
Vietnam	72	91	

Source: WHO51

As for water supplies, more than 90% of the population in the urban areas in Bhutan, Lao PDR, Sri Lanka, and Vietnam have water supplies on their premises (see Table 2). About three-fourths or more of the rural populations have water supplies on their premises, except for Lao PDR (Table 2). However, the proportion of population having water supplies free from contamination drop markedly for both rural and urban areas in Bhutan and Vietnam (data for Sri Lanka and Vietnam is not available). For example, in Bhutan, 83% of rural population have water supplies on their premises but only 28% of the population have water supplies that is free from contamination.

TABLE 2: IMPROVED WATER SUPPLIES				
Country	Proportion of Population Having Improved Water Supplies			
	Accessible on Premises Free from Contamination			ontamination
Bhutan	83	92	28	45
Lao PDR	53	92	_	_
Sri Lanka	74	93	_	_
Vietnam	83	91	_	78

Source: WHO and UNICEF, 2017⁵²

This shows that though access to water supply has improved in the four countries, the water quality is not free from contamination.

The data above shows that the rural population in particular still lack access to improved sanitation facilities and clean and safe water. Though there is no data for the urban slum population, their situation may be similar to that of the rural population. As such, access to improved sanitation and clean and safe water among women and girls living in rural areas and urban slums vulnerable to climate change will be more challenging. Climate change result in the disruption to water systems or sources, in which either the water becomes polluted, the toilets or bathrooms not having running water, or sanitation facilities are damaged.⁵³ Also, water sources could become polluted due to the mixing of waste water, thus contributing to an oral-faecal contamination pathway.⁵⁴

The lack of access to improved sanitation facilities and clean and safe water will have an impact on women's health, particularly their SRHR. Some of the issues that occur are as follow:

1. Menstrual Hygiene Practices: When there is lack of water, menstrual hygiene practices among women and girls will be difficult. The typical way for them to cope is to refrain from drinking water to avoid having to go to the toilet during the day, hence, exacerbating urinary tract infections and reproductive tract infections.^{55, 56} Likewise, when clean water is scarce, rural and poor women and girls tend to save water for household needs rather than use it for their personal needs, including for menstrual hygiene.⁵⁷ Also, the lack of water and toilet facilities in school contributes to absenteeism among girls and this impacts their education.

- 2. Waterborne Diseases and Health Problems: Lack of water will force women and girls to consume and use polluted water, making them to be more susceptible to sexual and reproductive health (SRH) problems, such as reproductive tract infections and urinary tract infections.⁵⁸ Consuming water from sources such as streams and ponds that are contaminated, women and girls and their families would suffer from diarrhoeal diseases, including cholera, which could end in fatalities.^{59, 60}
- 3. Added Workload: Women's and girls' work burden tend to increase because of climate change since their gender roles prescribe them to be primary care givers and in-charge of household chores. For example, during droughts and floods, the shortage of clean water would require women and girls to be responsible in fetching water for household usage. Girls have to drop out of school to help out with the household chores.⁶¹ Consequently, these women and girls would suffer from exhaustion and bone injuries from having to walk long distances to fetch heavy pots of water as well as sleep deprivation because the first water fetching task of the day usually occurs before dawn. 62 Having to walk far to fetch water also deprives them of the time they need to take care of their personal health and hygiene, including the time to access health care services, as well as other activities for self-development.63
- **4. Gender-based Violence:** Walking far to fetch water, especially to unfamiliar territories, puts women at higher risk of gender-based violence such as sexual harassment, sexual violence, and rape. ⁶⁴ They also experience gender-based violence when they have to walk far distances to access toilets or bathrooms, including when they are staying in temporary shelters due to climate change disaster. ⁶⁵

INTERLINKAGES WITH GOALS 3 AND 5

In the Asian context, Goal 6 is interlinked with Goals 1 (no poverty), 3 (good health and well-being), 9 (industry, innovation, and infrastructure), 11 (sustainable cities and communities), 16 (peace, justice, and strong institutions), and 17 (partnerships for the goals) in the recent UNESCAP report assessing progress for the SDGs under review this year. 66 For Goal 3, the interlinkages are specifically on Target 3.2 (newborn and children's death) and Target 3.3 (water-borne diseases). Water-borne diseases as mentioned earlier, such as diarrhoeal disease, do affect women' and girls' health. Though the UNESCAP report did not include Target 3.9, this target is interlinked with Goal 6. Women and girls die or suffer illnesses due to unsafe water, unsafe sanitation, and lack of hygiene, which was highlighted earlier.

There are also interlinkages between Goals 6 and 5. For instance, Target 5.2 (violence against women and girls in private and public spaces) and Target 5.4 (unpaid care and domestic work). To build women's and girls' resilience in health, particularly their SRHR, the interlinkages amongst Goals 6, 3, and 5 need to be prioritised. With good health and freedom from gender-based violence, women and girls are then able to actively contribute to building sustainable and resilient societies.

States should demonstrate high political commitment to provide women and girls with improved sanitation facilities, as well as affordable water supplies free of contamination, especially for those living in rural areas and who are marginalise or most vulnerable to climate change. This is to ensure that women's and girls' rights to water and health, including being free from gender-based violence, are protected by the states.

GAPS AND CHALLENGES THAT WILL HAVE IMPACT ON WOMEN'S HEALTH, PARTICULARLY THEIR SRHR

 Lack of quality data, including sex-disaggregated data by location. This is needed as evidence to strategically provide improved sanitation facilities and improved water supplies to the remaining unreached rural and urban populations, especially the marginalised and most vulnerable women groups.

- Lack or absence of gender mainstreaming in local/national policies and strategic action plans relating to water and sanitation, thus resulting in women's and girls' voices being ignored. Gender-responsive planning and implementation is not taken into consideration when implementing programmes on Goal 6 and other related goals, especially Goals 3 and 5, at the local and national levels. As a result, the rights⁶⁷ of women and girls for clean water and improved and safe toilets/sanitation are not prioritised, and the impact on women's health, safety, and risk of gender-based violence are overlooked.
- No gender-responsive budgeting and lack of financial resources when implementing projects and programmes on water and sanitation for all. Therefore, many women and girls, especially in the rural areas, still do not have access to improved sanitation facilities and improved and safe water supplies in their houses.

RECOMMENDATIONS

- States should collect sex-disaggregated data by location and relevant social indicators, as well as conduct gender analysis, to provide evidence to strategically provide improved and safely managed sanitation facilities and improved water supplies to the remaining unreached rural and urban populations, especially the marginalised and most vulnerable women groups.⁶⁸
- States or research institutes need to conduct future research on the gender-differentiated impact of changes in water quantity and quality on health during normal times as well as during extreme weather events.
- States should demonstrate high political commitment to provide women and girls with improved sanitation facilities, as well as affordable water supplies free of contamination, especially for those living in rural areas and who are marginalised or most vulnerable to climate change. This is to ensure that women's and girls' rights to water and health, including being free from gender-based violence, are protected by the states.
- As a step to building sustainable and resilient societies, states or local government need to improve projection on water supply to improve its provision, and develop water management strategies for adaptation to changes in demand and supply that is gender-responsive, particularly during floods or droughts, in rural and high population density areas most prone to climate change.
- States or local authorities should ensure more effective sanitation facilities management, including management and disposal of excreta and wastewater, and construction of durable and functioning women-friendly and safe toilets,

- particularly in rural areas that are vulnerable to climate change-related disasters, to build resilience.
- The United Nations Framework Convention on Climate Change (UNFCCC) financial mechanisms [such as the Green Climate Fund (GCF), the Global Environment Facility (GEF), and Adaptation Fund (AF)] should give additional weight to projects with well-designed gender elements and social cobenefits. GCF should fund more country-driven adaptation projects with non-carbon benefits/social co-benefits to improve water supply that are gender-responsive.

Women's Health, Particularly SRHR, in the Context of Climate Change for Goal 7: Ensure Access to Affordable, Reliable, Sustainable, and Modern Energy for All

GOAL INFORMATION

Among Bhutan, Lao PDR, Sri Lanka, and Vietnam, for year 2016, Vietnam has the highest percentage of the population that relies primarily on clean fuels⁶⁹ and technologies⁷⁰ (67%) as shown in Table 3. Meanwhile, only about half of Bhutan's population rely primarily on clean fuels and technologies, and for Sri Lanka, it is 26%. The percentage for Lao PDR is almost negligible.

Therefore, it is not surprising that majority of the rural population in the four countries still use solid fuels⁷¹ in their households, especially Lao PDR (refer to Table 4). In Lao PDR, the percentages of population living in the urban and rural areas using solid fuels are about similar (92% vs. 95%) as shown in Table 4.

When analysed based on wealth quintile, there is a marked difference between the richest quintile and the poorest quintile in the use of solid fuels for all the countries with available data (Table 5). The percentage of households from the poorest quintile using solid fuels is higher than those from the richest quintile. Though there is no data available for rural wealth quintile, nevertheless, it can be generalised that the situation would be somewhat similar to the urban situation or even worse.

Due to poverty, rural population in Asia—including some urban population as shown in Tables 4 and 5—are still depending on solid biomass fuels for cooking and heating. Biomass burning is a well-known source of air pollution (indoor pollution and ambient pollution), which has adverse impacts on human health, the environment, and the climate.^{72, 73} Women and girls bear the greatest burden of energy poverty due to gender inequality. They have less access to clean fuels and

TABLE 3: POPULATION RELYING PRIMARILY OF	1
CLEAN FUELS AND TECHNOLOGIES	

Country	Percentage (%)	
Bhutan	52	
Lao PDR	6	
Sri Lanka	26	
Vietnam	67	

Source: WHO74

TABLE 4: POPULATION USING SOLID FUELS BY RESIDENCE (ESTIMATES), %

Country	Rural	Urban
Bhutan	56	<5
Lao PDR	>95	92
Sri Lanka	83	34
Vietnam	61	16

Source: WHO75

TABLE 5: HOUSEHOLDS USING SOLID FUELS BY URBAN WEALTH QUINTILE (ESTIMATES)					
Country	Q1 (Poorest)	Q2	Q3	Q4	Q5 (Richest)
Bhutan	10.2	1.2	0.5	0	0.1
Lao PDR	100	99.3	95.5	90.9	64.7
Sri Lanka	N/A	N/A	N/A	N/A	N/A
Vietnam	72.7	20.1	6.6	3.0	0.6

Source: WHO⁷⁶

technologies, particularly the poor and marginalised women and girls in the rural areas. Unabated climate change will force them to continue using biomass fuels for cooking and heating in their households, thus constantly exposing them to the plumes of biomass burning.⁷⁷ As developing countries in Asia shift from fossil fuel to sustainable energy solutions (e.g., renewable energy), particularly biomass energy,⁷⁸ women and girls will continue to be adversely impacted by air pollution.

Women and girls bear the greatest burden of energy poverty due to gender inequality. They have less access to clean fuels and technologies, particularly the poor and marginalised women and girls in the rural areas. Unabated climate change will force them to continue using biomass fuels for cooking and heating in their households.

The impact on women's health, particularly their SRHR, include the following:

- 1. Health Problems from Indoor Air Pollution: Women's and girls' health are most affected by indoor air pollution as they are often responsible for cooking in their families. Using biomass fuels for cooking exposes women and girls to biomass burning pollutants,⁷⁹ which has a negative impact on their health. Indoor air pollution is known to cause health problems such lung cancer,⁸⁰ stroke, ischaemic heart disease, and various respiratory diseases [such as pneumonia and chronic obstructive pulmonary diseases (COPD)], as well as linked to pregnant women giving birth to low birth weight babies.^{81, 82}
- 2. Impact of Biomass Energy: Biomass burning—to produce energy and from agriculture activities—is a known source of ambient air pollution. The focus of the brief is on the former since biomass energy as a source of renewable energy is highly popular in Asia. 83 In 2012, solid biomass fuels (70% traditional 84 and 10% modern) comprised the largest share of the total consumption of renewable energy in Asia and the Pacific. 85 Biomass energy projects have various negative social and environmental impact. Biomass production for non-food purposes will compete with food production for the limited arable land and water resources available. 86 When large-scale land acquisitions happen, small and medium farmers, including women and indigenous people, will be displaced and this affects their households' food security. 87 Biomass production would result in increasing

- food prices due to decreasing food supply, as demonstrated when this triggered the food crisis in 2007 in Asia.⁸⁸ Food insecurity affects women more than men as women would tend to eat less so that their husbands and children could have more food.⁸⁹ Furthermore, women are more susceptible to nutritional deficiencies compared to men due to their distinct nutritional requirements, especially when they are pregnant or breastfeeding, and their nutritional needs are also affected by the multiple roles and tasks they engage in daily.^{90, 91}
- 3. Time and Energy Poverty: On average, women and girls spend about 1.4 hours per day collecting biomass fuels and then spend several more hours cooking using inefficient stoves, exposing them to long-term burning biomass emissions. 92 This deprives them of the time for other economic, family, and leisure activities, as well as the time to participate and engage in decision-making at the community/local level on matters related to building sustainable and resilient societies. In addition, for girls, it deprives them the time for education. Further, women and girls who have to travel far to collect fuels for cooking will be at risk of gender-based violence.

INTERLINKAGES WITH GOALS 3 AND 5

In the recent UNESCAP report, Goal 7 is interlinked with Goals 1 (no poverty), 3 (good health and well-being), 4 (quality education), 5 (gender equality), 6 (clean water and sanitation), 8 (decent work and economic growth), 9 (industry, innovation, and infrastructure), 10 (reduced inequalities), 11 (sustainable cities and communities), 12 (responsible consumption and production), 13 (climate action), and 16 (peace, justice, and strong institutions).⁹³

When looking at the interlinkages between Goal 7 and Goal 3, the report explicitly mentioned Target 3.7 (universal access to SRH care services), Target 3.8 (achieve universal health coverage), and Target 3.9 (deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination). It is commendable that Target 3.7 is incorporated as this indicates that the effect of Goal 7 on women's and girls' SRHR is recognised. Target 3.7 calls for: "By 2030, ensure universal access to SRH care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes."

On the other hand, when looking at the interlinkages between Goal 7 and Goal 5, Targets 5a and 5b were identified. Target 5a focuses on "[u]ndertak[ing] reforms to give women equal rights to economic resources, as well as access to ownership

and control over land and other forms of property, financial services, inheritance, and natural resources, in accordance with national laws." Target 5b calls for "[e]nhance[ment of] the use of enabling technology, in particular information and communication technology, to promote the empowerment of women."

Additionally, the interlinkages between Goal 7 and Goal 16 are related to Target 16.1 (reduce all forms of violence and related death rates), which also has components related to gender-based violence. In view of this, the interlinkages between Goal 7 and Goal 5 should also include Targets 5.2, that is "Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitations."

GAPS AND CHALLENGES THAT WILL HAVE IMPACT ON WOMEN'S HEALTH, PARTICULARLY THEIR SRHR

- States' priority is geared towards policies on investing in renewable energy rather than on policies to provide women with clean cooking fuel and technology. Unless states realign their priority, progress on access to clean cooking will remain negligible94 and women's exposure to indoor air pollution will persist as they continue to depend on solid biomass fuels for cooking and heating. It will also contribute to increasing greenhouse gas (GHG) emissions.95
- It is encouraging that states are shifting from fossil fuel energy to renewable energy (e.g., solid biofuels/biomass, hydro, solar, and wind, amongst others). However, some renewable energy sources have more negative impacts on the community, including women, as well as the environment, than others. Biomass energy as highlighted earlier is one example and widely utilised in Asia. The lack of attention on how energy impacts women indicates a lack or absence of gender consideration in energy planning, policy, financing, and programming. Moreover, women are not involved in the decision-making related to the gender and energy nexus.
- The lack of funding and gender-budgeting have also stalled gender mainstreaming in the energy sector, including the collection of sex-disaggregated data and gender statistics on clean energy access. One study shows that out of 174 programmes on renewable energy, only about 21 programmes have the budget to address gender and social inclusion in sustainable energy solutions.⁹⁶

RECOMMENDATIONS

- States should prioritise implementing a gender-responsive policy on access to clean cooking fuels and technology to accelerate progress on clean fuels and technology for cooking, particularly in the rural areas and as part of poverty reduction strategy which will contribute to building sustainable and resilient societies.
- States should source and finance programmes/projects
 to ensure households switch to clean cooking fuels and
 efficient stoves to achieve access to clean cooking fuels
 and technology for all, particularly in the rural areas.
 The programmes/projects must be gender-responsive—
 including having a gender-budgeting component and a
 gender action plan.
- Ensure effective financing/grants from the financial mechanisms of the Convention (e.g., GCF and GEF) in order for developing countries, particularly the least developed countries, to move from fossil fuel to renewable energy. Investment should be focused towards wind and solar⁹⁷ instead of biomass and hydro energy, integrating gender mainstreaming and women's involvement throughout the process. When financing renewable clean energy—such as wind and solar—GCF and GEF must take into account the principle of doing no harm and doing good to the community—including environmental and social wise—as well as protect the rights of women and indigenous peoples and their land.
- Women's participation and engagement in the gender and energy nexus needs to be initiated and strengthened at all levels (local, sub-national, and national) and in all processes. Women's input and contributions are critical, particularly on access to energy and the impact of renewable energy; as end users, they know best what their needs and priorities are. Hence, there is an urgent need to promote women's leadership, competency, and engagement in the energy sector. Efforts must also be taken to promote the involvement of women entrepreneurs, particularly those from women-led micro- and small-scale business, which will encourage more women-led energy solutions.⁹⁸
- Key stakeholders, including women's groups, need to come to a consensus on the gender-sensitive targets and indicators for the gender and energy nexus while taking into account climate change. The targets and indicators should focus on energy access and affordability, the impact of renewable energy programmes/projects, representation in the energy sector and energy entrepreneurship, and gender equality in the energy sector (e.g., policy, regulations, and addressing discriminatory social norms and practices).

Women's Health, Particularly SRHR, in the Context of Climate Change for Goal 11: Make Cities and Human Settlements Inclusive, Safe, Resilient, and Sustainable

GOAL INFORMATION

The urban population in Bhutan, Lao PDR, Sri Lanka, and Vietnam are low (see Table 6), however, it will increase in the years to come as per the urbanisation trend in Asia. The attraction of cities or towns is mainly due to pull factors such as better job opportunities and higher salaries, better housing, more public amenities and infrastructure, and better health care facilities and schools. The push factors also play a significant part; for instance, poverty, food insecurity, lack of land access, climate change disaster, natural disaster, and conflict.

TABLE 6: PERCENTAGE OF URBAN POPULATION				
Country	Total Population (Thousand)	Urban Population		
	Rural	Urban		
Bhutan	775	39%		
Lao PDR	6,802	39%		
Sri Lanka	20,715	18%		
Vietnam	93,448	34%		

Source: WHO and UNICEF99

Rural to urban migration has its set of distinct problems, such as informal settlements, gender-based violence, trafficking, lack of access to basic services and facilities (including health services such as SRHR services), marginalised and outcast communities, and others. Though male migration is more common than female migration, there has been an increase in women and girls migrating to urban areas¹⁰⁰—sometimes even to the extent of moving to another country—in search of better employment, as well as water, food, and shelter when their villages are destroyed due to climate change-related disasters.¹⁰¹

The privatisation of health care services, as well as the mushrooming of private hospitals and clinics in cities, which are profit-oriented rather than welfare-oriented, deprive marginalised women of getting the health services they need, including SRHR services.

All these problems will have an impact on women and girl migrants' health, particularly their SRHR, which results in the following issues:

- 1. Access to and Affordability of Healthcare Services, including SRHR Services: Even though cities have more and better health care facilities, women still face challenges in accessing these services due to the issue of accessibility and affordability. This applies particularly to vulnerable women and girls, the elderly, those with disabilities, 102 migrant women, and women from marginalised groups who generally make up the urban poor or poorest population. Accessibility barriers may include lack of time due to long working hours, long waiting hours at public health care facilities, transportation costs, and lack of decision-making power due to gender inequality. The privatisation of health care services, as well as the mushrooming of private hospitals and clinics in cities, which are profit-oriented rather than welfare-oriented, deprive marginalised women of getting the health services they need, including SRHR services.¹⁰³ Additionally, SRHR is not prioritised in the urban health programming of the New Urban Agenda. 104 Unabated climate change will make the situation worse for the urban poor women and girls.
- 2. Safety: The incidences of gender-based violence such as sexual assault, sexual harassment, and rape—which at times even lead to the murder or serious physical injury to the victims—have been increasing in cities. 105 For example, the reported rape cases in New Delhi, India have increased from about 1,290 cases in 2012 to 2,155 cases in 2016. 106 Unfortunately, due to the unavailability or lack of data on gender-based violence collected by cities, a comparison between cities is not possible. 107 This shows that cities lack safe spaces and infrastructure for women and girls, and this has an impact on their safety, dignity, and bodily rights. This indicates that city or urban planning did not make protecting women's and girls' human rights and safety a priority.
- 3. Female Migration: Migration, particularly across borders, makes women more vulnerable to exploitation wherein they are at risk of being trafficked and forced to work either as sex workers, bonded labourers, domestic workers, or workers in other informal jobs, ¹⁰⁸ as well as "brides for sale" (marriage migration). ^{109, 110} Due to the rise of migration amongst women for various reasons, the feminisation of migration has been observed particularly in South Asian countries, such as Bangladesh, Nepal, and Sri Lanka, ¹¹¹ while the "bride for sale" trend is observed in Vietnam. ¹¹² Restrictive policies in countries of destination foster undocumented migration, which results in women

being more vulnerable to exploitation and gender-based violence, and the situation would worsen with climate change. 113 Despite experiencing gender-based violence, the women prefer to suffer in silence rather than reporting the cases. This is mainly due to the lack of awareness of their legal rights or due to social taboos, which are widespread in patriarchal societies.

INTERLINKAGES WITH GOALS 3 AND 5

The interlinkages amongst Goal 11 and other goals are observed in Goals 3 (good health and well-being), 6 (clean water and sanitation), 9 (industry, innovation, and infrastructure), 10 (reduced inequalities), 12 (responsible consumption and production), 14 (life below water), and 15 (life on land) according to the recent UNESCAP report.¹¹⁴

The interlinkages between Goal 11 and Goal 3 are found specifically in Target 3.2 (newborn and children's death), Target 3.3 (water-borne diseases), and Target 3.9 (deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination). The interlinkages between Goal 11 and Goal 3 are similar to the interlinkages seen earlier between Goal 6 and Goal 3. However, ARROW additionally recommends the inclusion of Target 3.9. Aside from the three targets of Goal 3 mentioned above, ARROW also recommends that Target 3.7 and Target 3.8 of Goal 3 should also be included. Target 3.7 reads as "By 2030, ensure universal access to sexual and reproductive health (SRH) care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes," and Target 3.8 is "Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable medicines and vaccines for all." Both the targets are essential to measure the accessibility and affordability of health care services, including SRHR services, for women and girls, particularly migrants and vulnerable populations living in urban settlements.

The UNESCAP report did not state the interlinkages between Goal 11 and Goal 5. However, ARROW believes that Goal 11 has a significant influence on Goal 5, specifically Target 5.2. This is in view that trafficking, gender-based violence, and other exploitations are issues affecting women and girls in cities and urban settlements as mentioned earlier. Target 5.2 is "Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation."

States should guarantee provision of health care services, particularly SRHR services, to poor and marginalised women groups living in the cities who are vulnerable to climate change-related disaster regardless of their citizenship. The services should be accessible and affordable, as well as of high quality.

GAPS AND CHALLENGES THAT WILL HAVE IMPACT ON WOMEN'S HEALTH, PARTICULARLY THEIR SRHR

- Poor urban planning, which lacks social inclusivity and gender consideration, will further neglect women and girls from the urban poor or the poorest group. This hinders them from accessing and using public services and infrastructure they are entitled to just like their wealthier counterparts. This perpetuates the vicious cycle of inequality between the rich and the poor in cities. Climate change will widen the disparity, as poorer areas will be more affected than others, which will result in poorer women being worse off in their health and well-being when they are unable to access or afford health care services, especially SRHR services.
- Urban planning tends to be gender-blind and often fails to
 prioritise women's and girls' bodily rights and safety, thus
 putting them at increased risk of gender-based violence and
 other abuses. It also puts women—especially those who are
 elderly, disabled, and pregnant—at risk of other injuries or
 harm when there is lack of safe public toilets, sidewalks,
 pedestrian crossing, lighted streets, emergency alarms in
 public spaces, public transportation, and early-warning
 systems.
- Female migrants in the cities are often neglected and discriminated. They often lack awareness on their rights, and there is very little safeguard to protect them, particularly the undocumented migrants or those who are victims of trafficking. He when they experience exploitation, gender-based violence and abuse of their rights, including labour and health rights, they do not have access to legal services and proper channels to report these violations. Even if there are such services, migrant women themselves may fear that reporting will result in repercussion from their perpetrators, especially if the culprit is of higher authority and has the power to continue abusing them.

RECOMMENDATIONS

- States should guarantee provision of health care services, particularly SRHR services, to poor and marginalised women groups living in the cities who are vulnerable to climate change-related disaster regardless of their citizenship. The services should be accessible and affordable, as well as of high quality and delivered in the most professional manner by the healthcare service providers. This is one way to strengthen the resilience of excluded populations in the cities.
- Local governments/city municipals need to improve and expand safeguards for women through creating safe or women-friendly zones and access to quality basic facilities, including for the disabled, and efficient infrastructure. This should be in coherence with the New Urban Agenda and the 2030 Agenda while taking into account women's needs during extreme weather events. These processes must be based on approaches that are based on human rights and inclusive, and involve women, especially migrants and marginalised populations, so as to leave no one behind when building sustainable cities and urban settlements.
- States should provide shelters and support to migrant
 women who are either exploited or abused, such as those
 who are trafficked or experiencing gender-based violence
 and other abuses, including those resulting from climate
 change. The local government across sectors in partnership
 with CSOs or women's groups to rehabilitate and develop
 the capacities of these women survivors, as well as create
 enabling environment to provide them access to economic
 opportunities in urban settlements.
- States need to strengthen the implementation of national laws
 that are available to eradicate gender-based violence and
 other types of abuses, including trafficking, especially during
 climate change-related disasters. To encourage reporting
 of incidences and the enforcement of the laws, authorities
 must have zero-tolerance toward trafficking, genderbased violence, and other abuses, while at the same time
 recognising, respecting, and protecting the rights of women,
 including migrant women, regardless of their documentation
 status.

Women and girls are at higher risk of nutrition deficiencies compared to men because of their unique nutritional requirements, especially during menstruation, and when pregnant or breastfeeding. Their nutritional needs are also affected by the multiple roles and paid/unpaid jobs they engage in daily.

Women's Health, Particularly SRHR, in the Context of Climate Change for Goal 12: Ensure Sustainable Consumption and Production Patterns

GOAL INFORMATION

Asia is known as the "engine of manufacturing for the world."¹¹⁷ The manufacturing sector has contributed to the economic growth of many Asian countries, including the less developed countries, as it fuelled the utilisation of natural resources (e.g., materials, energy, and water) widely available in many countries in this region. ¹¹⁸ The downside to the growth of the manufacturing sector and industrialisation is that it leads to rapid urbanisation. This also creates a rising middle-class population, ¹¹⁹ which generates an increasing demand for more material/product consumption. The increase in material consumption generates more pollutants and waste, ¹²⁰ including GHG emissions, which contributes to global warming and worsens climate change.

The above has repercussions on women's health, particularly their SRHR, as depicted in the issues below:

- 1. Food Security:¹²¹ An increase in product consumption leads to an increase in various kinds of wastes, including food loss and wastage. In low-income countries, food loss and wastage happens in the early stages of the supply chain.¹²² For example, in South Asia and Southeast Asia, the loss and waste are at the production (32%) and the handling and storage (37%) stages.¹²³ This shows an inefficient use of resources (e.g., land, water, and human resource), as well as unnecessary GHG emissions.¹²⁴ In Asia, the agriculture sector hires more women than men.¹²⁵ This has serious implications for women farmers' livelihood and their households' food security, especially those living in poor rural areas and are vulnerable to extreme weather events.
- 2. Malnutrition: 126 When there is food insecurity in a country or community, it will lead to some groups of the population suffering from undernutrition. Women and girls are at higher risk of nutrition deficiencies compared to men because of their unique nutritional requirements, especially during menstruation, and when pregnant or breastfeeding. Their nutritional needs are also affected by the multiple roles and paid/unpaid jobs they engage in daily. 127 Undernourished pregnant women are at high risk of having pregnancy and delivery complications, such as intrauterine growth retardation, premature labour, stillbirth, prolonged labour, and giving birth to low birth weight babies. 128 Undernourished pre-puberty girls may experience delayed menarche, while undernourished women may suffer from amenorrhoea and infertility. 129

3. Impact of Pollutants and Waste: The production and consumption processes generate waste and pollutants such as toxic chemicals, hazardous wastes, and persistent organic pollutants, which could pollute the air, soil, and water. The generation, transportation, and disposal of these hazardous chemicals and wastes will have an impact on human health and the environment. Though the Basel Convention, 130 Rotterdam Convention, 131 and Stockholm Convention¹³² (collectively known as the BRS conventions) require signatory states to regularly report on the hazardous waste and pollutants, not all states comply. For example, Lao PDR has not submitted a report to the Basel Convention since its first round of national reporting in 2001.¹³³ Bhutan did submit the report annually to the Basel Convention, however, it did not provide any information on the effect of hazardous wastes on human health and environment as no study was conducted. 134 Sri Lanka's report for that similar section focuses mainly on occupational health, while Vietnam's report focuses on solid waste. 135 Neither of these country reports mentioned the impact on women's health, including their SRHR.

INTERLINKAGES WITH GOALS 3 AND 5

The UNESCAP report identifies interlinkages between Goal 12 and these goals: 3 (good health and well-being), 4 (quality education), 6 (clean water and sanitation), 7 (affordable and clean energy), 8 (decent work and economic growth), 9 (industry, innovation, and infrastructure), 10 (reduce inequalities), 11 (sustainable cities and communities), 14 (life below water), 15 (life on land), and 17 (partnerships for the goals). 136 For Goal 3, its interlinkages with Goal 12 are specifically on Target 3.9 (deaths and illness from hazardous chemicals and air, water and soil pollution, and contamination).

The report did not point out any interlinkages between Goal 12 and Goal 5, however, ARROW would like to highlight that there are in fact interlinkages between these goals. We identified two targets that are related to the issues mentioned earlier:

- Target 5.1. End all forms of discrimination against all women and girls everywhere; and
- Target 5.a. Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.

GAPS AND CHALLENGES THAT WILL HAVE IMPACT ON WOMEN'S HEALTH, PARTICULARLY THEIR SRHR

- In Asia, half of the population lives in the rural areas with a majority being agrarian communities, so farming and food security are closely linked together. 137 When food loss and waste happen at the production, as well as handling and storage stages, it is the small and medium farmers, including women farmers, who will suffer the brunt, particularly their income and household food security. Studies have shown that reasons for food loss and waste are mainly due to "financial, managerial, and technical limitations in harvesting techniques, storage and cooling facilities in difficult climatic conditions, infrastructure. packaging, and marketing systems."138 Gender-specific information on how food loss and waste at the early stages of supply chain affects women and girls-particularly those living in rural poor communities in Asia vulnerable to climate change—is extremely crucial as this threatens their survival.
- When there is food insecurity at the household level, women and girls are the most affected due to gender inequality. Women and girls in South Asia—including Bhutan and Sri Lanka—are the most affected due to the practice of household food hierarchies where they are allowed to eat only after men and boys have eaten.¹³⁹ They will suffer from hunger and undernutrition, which will eventually affect their health, including their SRH, as mentioned earlier.¹⁴⁰
- Even though the Basel Convention requires states to report annually on the effect of hazardous wastes on human health and environment, there is no requirement for reporting by gender or sex-disaggregated information. As a result, there is no information from the states on how hazardous wastes, hazardous chemical, and pollutants affect women's health, including their SRHR. This has a profound implication; since reporting on the impact on women's health, including SRHR, is not required, states are not compelled to carry out gender impact studies. This discrepancy may also apply to other conventions' national reporting.
- States are embracing the gender-responsive approach as stipulated in the BRS conventions when it comes to addressing the impact of hazardous chemicals and wastes resulting from production and consumption processes on human health and the environment. However, in practice, women's engagement is within a limited capacity. Women are generally regarded as vulnerable populations¹⁴¹ or beneficiaries, 142 or at most, as stakeholders 143 in countries' National Implementation Plans (NIPs) 144, 145 Women are rarely considered as agents of change 146 in these NIPs.

Though it is encouraging that states consider women as decision-makers, however, it is disappointing that women are not regarded as agents of change or having a voice in policy change or action. This connotes that states still view women from the patriarchal mindset as "victims" or "recipients."

States have to abolish harmful practices that promote gender discrimination, such as gender-ascribed roles and household food hierarchy systems. These practices...deprive women and girls...the food security and nutrition they required, which will contribute to their good health, particularly their SRH.

RECOMMENDATIONS

- States should conduct assessments or studies on how food loss and waste, especially at the early stages of the supply chain, affect women farmers' livelihood and household food security within the context of climate change. States should collaborate with CSOs and the private sector in assessing the condition of women farmers living in rural poor communities who are vulnerable to weather extreme events. Subsequently, they need to come up with recommendations to address food loss and waste, as well as its interlinkages with women farmers' livelihood and their household food security and health, including women's SRH, so as to leave no one behind in the quest of building resilient communities.
- States have to abolish harmful practices that promote gender discrimination, such as gender-ascribed roles and household food hierarchy systems.¹⁴⁷ These practices not only contribute to gender inequality, they deprive women and girls, particularly those from marginalised populations, the rest they need as well as the food security and nutrition they require. These will impact negatively on their health, particularly their SRH. States who are signatories to the International Covenant on Economic, Social, and Cultural Rights (CESCR) are legally bound to safeguard the right to food for its citizens,¹⁴⁸ particularly woman and girls who are undernourished and
 - left behind due to climate change events.
- States must strengthen national policies and strategies to regulate sustainable production and consumption while taking into account climate change.
- Stringent regulations and fines must also be implemented for the private sector (e.g., multinational corporations) to reduce hazardous waste, hazardous chemicals, and

- pollutants and their contamination to the air, soil, and water, and reduce GHG emissions, as well as negate negative impact on human health, particularly women's SRH. The Ministry of Human Resource and other related ministries (Ministry of Women's Welfare, Ministry of Environment and Natural Resources, Ministry of Finance, and others) should work closely with the private sector to transition current jobs—that are highly exposed to hazardous waste, hazardous chemicals, and pollutants, as well as those that contribute to GHG emissions—to green jobs, particularly for women workers. This will benefit the workers' health and the environment and build sustainable and resilient societies.
- State agencies/departments should collaborate to conduct studies to assess the gendered impact on how hazardous wastes, hazardous chemicals and pollutants affect women's and men's health, particularly SRH, as well as for workers and local community members. Reports of these studies should be available in the form of sex-disaggregated data and accessible to CSOs and women's groups for monitoring and follow-up purposes, as well as evidence in building resilient societies.
- State agencies/departments and/or local authorities need to strengthen the knowledge and skills of women involved as producers (e.g., women farmers and informal workers) who are exposed to hazardous waste, hazardous chemicals, and pollutants in the context of climate change. This is to build the capacity of the women producers on precautionary/preventive steps and actions to take in order to protect themselves and their families. They should also be trained to be champions for advocating for more environmental- and social-friendly practices in the production and consumption processes, including promoting the "3R" approach (reduce, reuse, and recycle), which will contribute to lower GHG emissions and build sustainable societies.
- States need to strengthen the operationalisation of utilising a gender-responsive approach—pertaining to strategies, action plans, programmes, and projects related to SDG 12 and its interlinkages with other goals—by increasing women's engagement not as beneficiaries, but as stakeholders and agents of change, including having a voice in policy change or action at the local, regional, and international levels. States need to also aim for gender-balanced representation for engagement at all levels, and across sectors, particularly when it is related to international multilateral environment agreement on hazardous chemicals and waste and climate change, as well as sustainable development.

Women's Health, Particularly SRHR, in the Context of Climate Change for Goal 15: Protect, Restore, and Promote Sustainable Use of Terrestrial Ecosystems, Sustainably Manage Forests, Combat Desertification, and Halt and Reverse Land Degradation and Halt Biodiversity Loss

GOAL INFORMATION

Asia is ecologically diverse and rich with many plants and animal species living within its various ecosystems. 149
However, it now faces threats of environmental degradation, such as deforestation, desertification, and loss of biodiversity resulting from unsustainable urbanisation, industrialisation (including extractive industries for minerals and plantations), and economic development. 150 Unabated climate change will aggravate the situation by adding more pressures on the limited natural resources and environment. This will surely disrupt the progress on sustainable development of the developing countries in Asia. 151 This includes the deferment in achieving SDG 5 (on women's health, particularly their SRHR), which is impacted by the issues below:

1. Internally Displaced/Cross-border Migration:

Unsustainable forest management (e.g., excessive logging), sea level rise, desertification, and land use for development and climate change adaptation/mitigation (e.g., building energy infrastructures such as construction of dams for hydropower and biomass energy production plants) generally result in the displacement of communities, especially the indigenous and marginalised populations. The displacement could either be internal or result in cross-border migration. These populations, particularly women and girls, will lose their homes and land, their livelihood, and opportunities for education, putting them at risk of trafficking or exploitation, including being forced into early marriage. These disadvantages will exacerbate their poverty level, which subsequently affects their health negatively, especially SRH.

2. Land Rights: The displacement of the populations mentioned above is partly due to the issue of land rights. Incidents of land grabbing in the name of development and climate change adaptation/mitigation is common among vulnerable and marginalised population, particularly indigenous peoples. Indigenous peoples' customary land is frequently targeted because their customary rights are generally not recognised and protected under national laws. 152 For other marginalised women, they lack access to land as they are often side-lined when it comes to inheritance rights to land ownership compared to their

male family members. Without land, households' food security will be affected as "land is an important factor to secure access to and the availability of food through own production." When this happens, the most destitute will be women and girls, be it health, social, or economic.

These populations, particularly women and girls, will lose their homes and land, their livelihood, and opportunities for education, putting them at risk of trafficking or exploitation, including being forced into early marriage. These disadvantages will exacerbate their poverty level, which subsequently affects their health negatively, especially SRH.

INTERLINKAGES WITH GOALS 3 AND 5

Ideally, Goal 15 should be interlinked with all the other goals. This is because, without a sustainable and resilient ecosystem and land, human lives on earth would be jeopardised. The UNESCAP report only highlighted the interlinkages between Goal 15 and the following goals: 2 (zero hunger), 4 (quality education), 6 (clean water and sanitation), 7 (affordable and clean energy), and 12 (responsible consumption and production). 154

The report did not specify any interlinkages between Goal 15 and Goals 3 and 5 respectively. However, we believe that Goal 15 does impact Goals 3 and 5.

For Goal 3, Goal 15 would have an effect on the following targets:

- Target 3.3. End epidemics of AIDs, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases;
- Target 3.7. Ensure universal access to SRH care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes;
- Target 3.8. Universal health coverage, including financial risk protection, access to quality essential health care services and access to safe, effective, quality and affordable essential medicines and vaccines for all; and
- Target 3.9. Reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.

Meanwhile, for Goal 5, Goal 15 would have an impact on the following targets:

- Target 5.2. Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation;
- Target 5.3. Eliminate all harmful practices, such as child, early, and forced marriage, and female genital mutilation; and
- Target 5. Undertake reforms to give women equal rights to
 economic resources, as well as access to ownership and
 control over land and other forms of property, financial
 services, inheritance and natural resources, in accordance with
 national laws.

GAPS AND CHALLENGES THAT WILL HAVE IMPACT ON WOMEN'S HEALTH, PARTICULARLY THEIR SRHR

- Customary and traditional practices in the patriarchal societies in Asia are a major barrier to women's access to land and resources. In Bhutan, Lao PDR, Sri Lanka, and Vietnam, legally, women and men have equal and secure access to land use, control, and ownership.¹⁵⁵ However, there are some customary or traditional practices that discriminate against women, and this eventually denies women of their land rights and inheritance rights.¹⁵⁶
- Development and climate change adaptation/mitigation are
 essential for a developing country to break away from poverty,
 as well as address climate change challenges to build resilient
 communities. However, the undesirable social and environmental
 impacts resulting from these programmes and projects are often
 disregarded by government and local authorities, at times for the
 sake of economic gains or benefit to some interested party.

RECOMMENDATIONS

- States need to improve laws on land use, control, and ownership to ensure that women and men have equal rights.
 If existing national law provides equal rights to both women and men, including inheritance rights, the states need to make sure that these rights are not overturned by customary or traditional practices that discriminate against women.
- If the land of the communities, especially the marginalised populations and indigenous peoples, needs to be used for development or climate adaptation/mitigation—which must be the last option—states or the local authority must firstly obtain free, prior, and informed consent from the affected community and provide due compensation to them as per the legal code. The community, include women, must be engaged from the onset regarding the resettlement plan, which should also take into account the community's food security, livelihood, clean water supply, and other needs.

Women's Health, Particularly SRHR, in the Context of Climate Change for Goal 17: Strengthen the Means of Implementation and Revitalise the Global Partnership for Sustainable Development

SDG 17, which focuses on strengthening the means of implementation and revitalising the global partnership for sustainable development, is a cross-cutting goal that applies to all the other 16 SDGs. Here, general recommendations for SDG 17 that are relevant to Goals 6, 7, 11, 12, and 15 will be presented.

RECOMMENDATIONS

Finance

- Ensure funding to support future research on the interlinkages between climate change, the reviewed SDGs, and women's health (particularly their SRHR), as very little information and data are available in countries in Asia. There is also an urgent need to conduct research on gender-differentiated impacts of climate change and its interlinkages with the reviewed SDGs. This is important to influence evidence-based policies—as current policies are either gender-blind or tend to simplify gender relations—as well as evidence-based design, planning, budgeting, monitoring, and evaluation of gender-responsive climate action for sustainable development.
- Funding from developed countries, including the
 Organisation for Economic Co-operation and Development
 (OECD) donors, is crucial for developing countries to
 achieve the 2030 Agenda and the Paris Agreement. As
 some developing countries in the region are transitioning
 to middle-income countries, this may act as a barrier to
 receiving funding. Donor aid policies must not limit its
 criteria to only low-income countries; these also need
 to consider the vulnerability of a country to climate
 change challenges, gender inequality, the poverty level of
 vulnerable populations, and other local contextual factors
 when deciding on aid to a specific country.
- States must strengthen tax revenues and initiate fiscal reforms that are gender-just and pro-poor. Funds generated should be utilised for public spending—e.g., on health including SRH, education, housing, public amenities and infrastructures, and to achieve gender equality and affirm women's human rights—in line with the reviewed SDGs and climate action. This budget for public spending must be incorporated into the national annual budget and must be transparent and monitored/tracked regularly. States also need to limit tax subsidies and evasion for corporations and commit to fighting illicit financial flows.

Climate financing mechanisms...should prioritise funding adaptation and mitigation projects that have components of gender-responsive development co-benefits, especially women's health, including SRHR. The argument not to fund the development component in adaptation projects is futile since adaptation projects generally comprise some development components as both are interlinked.

- Donors and UN financial mechanisms/entities must prioritise funding gender-responsive programmes/projects that are related to the reviewed Goals (such as Goals 6, 7, 11, and 12 or its interlinkages) and climate action (such as adaptation, mitigation, capacity building, technology development and transfer). Grants should be provided instead of loans, especially to least developing countries and Small Island Developing States (SIDS), to prevent rising debt crisis in these countries. This is hoped to promote sustainable gender-responsive access to finance in the implementation of the SDGs and climate action.
- Climate financing mechanisms (e.g., GCF, GEF, AF, and others) should prioritise funding adaptation and mitigation projects that have components of gender-responsive development co-benefits, especially women's health, including SRHR. The argument not to fund the development component in adaptation projects is futile since adaptation projects generally comprise some development components as both are interlinked.

Technology

- States must strengthen women's access to technology, digital literacy, and information and communications technology (ICT) and build their skills in order to reduce the technology and digital gaps among genders, especially those in the rural areas and those vulnerable to climate change disasters. States must ensure these women will not be left out in accessing information and services that affect their health and well-being.
- States need to promote the development, transfer, and dissemination of technology that engages women as agents of change and must develop gender-responsive solutions for issues related to climate change and the reviewed SDGs.
- States must provide women with inclusive and nondisruptive technological tools/equipment—low in GHG emissions—that could empower them, as well as serve as a safeguard to women's right to health, particularly their SRHR, and gender equality. Examples include

technology on clean cooking fuel and stoves, electricity for households, improved sanitation and water supply, health services, facilities and services for people with disabilities, gender-based violence prevention, and others, which will contribute to building resilient societies.

Capacity-building

- States need to build or strengthen capacities of women to meaningfully engage at all levels of SDGs implementation, and their follow-up and review. This could be done through investing in girls' education and women's training and capacity strengthening, as well as providing them access to science, technology, and innovation so that they could reach their full potential and become agents of change on matters related to the integration between climate change and the reviewed SDGs that are impacting their SRHR.
- States must strengthen the capacity of donors, policy-makers, parliamentarians, senior government officials, local government authorities, the CSOs, and the private sector to incorporate gender consideration into policies, strategies, programmes, and budgeting pertaining to sustainable development and climate action and its interlinkages. Whenever necessary, awareness creation should also be conducted for these key stakeholders if they lack the awareness or are gender-blind, as well as recruiting them as champions to integrate gender considerations into their respective domains to build sustainable and resilient societies, and building an enabling environment for CSOs to monitor the progress.
- Capacity strengthening of national statistical departments/ institutions in term of personnel's knowledge and skills, and equipment. This is pivotal as demand for sex-disaggregated data for gender-responsive evidence-based policy making, programming, and budgeting is overdue and neglected.

Trade should facilitate access to affordable medicines and SRHR services, access to efficient public transportation and amenities, clean energy, clean cookstoves, educational equipment and tools, energy-saving household appliances, mobile phones...

Also, the impact of patent protection must be seriously looked into as it affects the affordability of medicine for HIV treatments, sexually transmitted infections, and reproductive cancers.

Trade

- Trade should facilitate access to affordable medicines and SRHR services, access to efficient public transportation and amenities, clean energy, clean cookstoves, educational equipment and tools, energy-saving household appliances, mobile phones, and others. Also, the impact of patent protection must be seriously looked into as it affects the affordability of medicine for HIV treatments, sexually transmitted infections, and reproductive cancers.¹⁵⁷
- States must bear the sole responsibilities to provide its people¹⁵⁸ with public services (e.g., health care services including SRHR, education, water and sanitation, public transportation and amenities, parks, and others). These services must not be privatised as means for the states to generate income or pursue its economic agenda. The priority of the states should be to uphold its population rights, particularly the rights of women and vulnerable groups, so as to leave no one behind, and not neo-liberal market partnership¹⁵⁹ with other countries or large multinational corporations.

States or the lead agency for a development or climate change adaptation/mitigation programme/project must have safeguards... which protect the well-being of communities, including women, affected by the programme/projects.

Systemic Issues

Policy and Institutional Coherence

- States must ensure strong political will and commitment to the 2030 Agenda for Sustainable Development, the Paris Agreement, the Sendai Framework on Disaster Risk Reduction, and the New Urban Agenda, and their interlinkages. Further, mainstreaming the International Conference on Population and Development Programme of Action (ICPD PoA) and the Beijing Platform for Action (BPfA) into all the commitments must also be done.
- Ensure policy, institutional, programme, and budget
 planning coherence (in line with the reviewed goals and
 other related goals), wherein various ministries (such as
 Ministry of Women's Welfare, Ministry of Labour, Ministry
 of Health, Ministry of Education, Ministry of Finance,
 Ministry of Urban Development, Ministry of Water and
 Sanitation, Ministry of Energy, Ministry of Natural Resource
 and Environment, and others) and local governments build
 synergies and coherence with their work to integrate

- gender-responsive climate action. The focus should be on food security, nutrition, health services and information including SRHR, water and sanitation, energy, livelihood strengthening, poverty reduction, and infrastructure and transportation in order to reduce gender inequality and vulnerabilities, especially during climate change disaster.
- States or the lead agency for a development or climate change adaptation/mitigation programme/project must have safeguards—such as environmental and social policy and safeguards, gender policy and action plan, and indigenous peoples policy—which protect the wellbeing of communities, including women, affected by the programme/projects. They also need to ensure that information disclosure, particularly those pertaining to decision making and meaningful consultation with communities, apply the free, prior, and informed consent principle. Accountability mechanisms, such as independent redress and grievance mechanisms, must be accessible to communities or women who are affected or think they will be affected to seek justice.

Multi-stakeholder Partnerships

- Civil society organisations (CSOs), including organisations working with women and women-led groups, are key stakeholders with a vital contributing role in sharing their experience and expertise related to working on gender-related issues. CSOs need to be consulted in the planning, implementation, monitoring, and evaluation of gender-responsive programmes, including the SDGs monitoring at the sub-national and national levels. CSOs should also be included in all the formal and informal decision-making structures and spaces (e.g., national and regional spaces and UN spaces) where policy, financing, and international commitments pertaining to sustainable development and climate action are negotiated.
- Gender experts and women from the communities must be part of the key stakeholders involved in policy formation, including mitigation and adaptation instruments,¹⁶⁰ and in the implementation of programmes and projects related to the environment, and water and land issues. Gender consideration must be incorporated into all aspects of the programmes and projects; this includes gender-responsive budgeting.
- All UN agencies (such as UNFPA, UNDP, WHO, UNISDR, UNEP, UNFCCC, and UN Women) need to work together, instead of working in silos, to provide technical and financial assistance to countries to achieve the goals of the 2030 Agenda and the Paris Agreement. Gender consideration must be a priority within these UN entities' strategies, processes, and budgeting.

Strengthen public-private partnerships, South-South/North-South, and triangular cooperation. The enhanced synergies of these key stakeholders will help to accelerate the much-needed progress to achieve the SDGs and climate action. Innovative initiatives and mechanisms should be explored to enable the multi-stakeholder partnerships to function effectively and efficiently.

Multi-stakeholders need to come to a consensus on the gender indicators and data systems that are relevant to the reviewed SDGs and climate action. With this established, it will facilitate the monitoring and reporting of the gender analysis on the differentiated impact of climate change, which will contribute to evidence-based policy, programming, and budgeting for the reviewed SDGs.

Data, Monitoring, and Accountability

- Multi-stakeholders need to come to a consensus on the gender indicators and data systems that are relevant to the reviewed SDGs and climate action. With this established, it will facilitate the monitoring and reporting of the gender analysis on the differentiated impact of climate change, which will contribute to evidence-based policy, programming, and budgeting for the reviewed SDGs.
- States must establish a consolidated centralised data system at the national level, which is accessible by government officials, policy makers, CSOs, gender experts, and grassroots communities. This consolidated data system will hold data and information from population censuses, household surveys, administrative data, communitycollected data, and other reliable data sources (e.g., demographic and health surveys), as well as be responsible in managing sex-disaggregated data across social, economic, and environmental dimensions.

CONCLUSION

On the whole, the five Sustainable Development Goals (6, 7, 11, 12, and 15) under review in 2018 are found to affect women's and girls' health, particularly their SRHR. This is explicitly observed in the interlinkages between the reviewed goals (6, 7, 11, 12, and 15) with Goal 3 (good health and well-being) and Goal 5 (gender equality).

In Asia, the progress of the implementation of these goals has been slow going. Therefore, it needs to be accelerated as agreed unanimously by the member states and major groups and other stakeholders during the Fifth Asia Pacific Forum on Sustainable Development.

In the days ahead, as member states strengthen their partnerships—especially with CSOs—to achieve the SDGs, efforts must take into consideration its impact on women's and girls' health, particularly SRHR. The recommendations presented in this brief for each of the five goals along with the cross-cutting Goal 17 take into account climate change, as well as incorporate women's rights, gender inclusion, and gender responsiveness. The recommendations serve to facilitate member states to implement actions that will benefit women's health, particularly their SRHR, while focusing on the bigger picture of achieving the respective goals. This will ensure that women and girls will not get left behind in the building of sustainable and resilient societies.

In the days ahead, as member states strengthen their partnerships—especially with CSOs—to achieve the SDGs, efforts must take into consideration its impact on women's and girls' health, particularly SRHR....

This will ensure that women and girls will not get left behind in the building of sustainable and resilient societies.

ANNEX:

MAIN MESSAGES FOR VOLUNTARY NATIONAL REVIEWS OF ASIAN COUNTRIES COVERED IN THIS BRIEF

BHUTAN:

https://sustainabledevelopment.un.org/index.php?page=view&type=30022&nr=548&menu=3170

LAO PDR:

https://sustainabledevelopment.un.org/index.php?page=view&type=30022&nr=882&menu=3170

SRI LANKA:

https://sustainabledevelopment.un.org/index.php?page=view&type=30022&nr=998&menu=3170

VIETNAM:

https://sustainabledevelopment.un.org/index.php?page=view&type=30022&nr=583&menu=3170

LIST OF ABBREVIATIONS

AF	Adaptation Fund	SDGs	Sustainable Development Goals
APFSD	Asia-Pacific Forum on Sustainable Development	SIDs	Small Island Developing States
BPfA	Beijing Platform for Action	SRH	Sexual and Reproductive Health
CESCR	International Covenant on Economic, Social,	SRHR	Sexual and Reproductive Health and Rights
	and Cultural Rights	UN	United Nations
CSOs	Civil Society Organisations	UN Women	United Nations Entity for Gender Equality
GCF	Green Climate Fund		and the Empowerment of Women
GEF	Global Environment Facility	UNDP	United Nations Development Programme
GHG	Greenhouse Gas	UNEP	United Nations Environment Programme
HLPF	High-level Political Forum on Sustainable	UNESCAP	United Nations Economic and Social Commission
	Development		for Asia and the Pacific
ICPD PoA	International Conference on Population and	UNFCCC	United Nations Framework Convention on
	Development Programme of Action		Climate Change
ICT	Information and Communications Technology	UNFPA	United Nations Population Fund
IPCC	The Intergovernmental Panel on Climate Change	UNISDR	United Nations Office for Disaster Risk Reduction
NIPs	National Implementation Plans	VNRs	Voluntary national reviews
NUA	New Urban Agenda	WHO	World Health Organisation
OECD	Organisation for Economic Co-operation and		
	Development		

ENDNOTES

- "High-level Political Forum on Sustainable Development," UN Department of Economic and Social Affairs (UNDESA), accessed June 14, 2018, https://sustainabledevelopment.un.org/ hlpf.
- "Voluntary Reviews National Database," UNDESA, accessed June 14, 2018, https://sustainabledevelopment.un.org/vnrs/.
- 3. "Voluntary Reviews Database."
- 4. "High-level Political Forum."
- 5. "Voluntary Reviews Database."
- "HLPF 2018," UNDESA, accessed May 16, 2018, https://sustainabledevelopment.un.org/ hlpf/2018.
- Singapore is also submitting its VNR this year. However, since the focus of this advocacy brief is on developing and least developed countries in Asia and Singapore is a developed country, it will not be included.
- Failing to find data or examples from these four countries, those from other developing countries in Asia will be used.
- The sub-regions are Central Asia, East Asia, North Asia, South Asia, Southeast Asia, and West Asia
- UNDESA, "Youth Population Trends and Sustainable Development," Population Facts
 No. 2015/1 (May 2015): 1, accessed May 16, 2018, http://www.un.org/esa/socdev/documents/youth/fact-sheets/YouthPOP.pdf.
- 11. UNDESA, "Youth Population Trends."
- 12. UNDESA, "Youth Population Trends."
- 13. ARROW, "Asia-Pacific Youth Call to Action; Preparatory Youth Forum for the Asia-Pacific Forum on Sustainable Development (APFSD) 2017, 23-25 March 2017, Bangkok," accessed May 23, 2018, http://arrow.org.my/publication/ asia-pacific-youth-forum-call-action-pre-apfsd-2017-sustainable-solutionseradicate-poverty-promote-prosperity/.
- 14. Graeme Hugo, World Migration Report 2015: Urban Migration Trends, Challenges, Responses and Policy in the Asia-Pacific; Background Paper (Adelaide: International Organisation for Migration, 2014), 11, accessed May 2018, https://www.iom.int/sites/default/files/WMR-2015-Background-Paper-GHugo.pdf.
- 15. Hugo, World Migration Report 2015, 18-19.
- 16. Hugo, World Migration Report 2015, 29, 31.
- 17. The region also experiences natural disasters that are not due to climate change, such as tsunamis and earthquakes.
- Robert J. Nicholls and Anny Cazenave, "Sea-level Rise and Its Impact on Coastal Zones," Science 328 (2010): 1519.
- 19. Yasuaki Hijioka et al., "Asia," in Climate Change 2014: Impacts, Adaptation, and Vulnerability; Part B: Regional Aspects; Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, eds. Barros et al. (Cambridge: Cambridge University Press, 2014), 1346.
- 20. El Niño is generally referred to as the warm phase "linked to a period of warming in sea surface temperature" higher than the average surface temperature. Source: USA National Oceanic and Atmospheric Administration, "What Are El Niño and La Niña?," accessed August 12, 2016, http://oceanservice.noaa.gov/facts/ninonina.html.
- 21. "'El Niño is Not a One-off Event,' UN Says, Calling for Action to Address Phenomenon's Impacts," UN News Centre, UN, accessed May 20, 2016, https://news.un.org/en/ story/2016/05/528652-el-nino-not-one-event-un-says-calling-action-address-phenomenonsimpacts.
- 22. Hijioka et al., "Asia," 1338.
- UNESCAP, Report of the Fifth Asia-Pacific Forum on Sustainable Development, Bangkok, March 28-30, 2018, 4, accessed March 3, 2018, https://www.unescap.org/commission/74/document/E74_31E.pdf.
- 24. UNESCAP, Report of the Fifth APFSD, 4.
- APRCEM, "People's Forum Statement for Asia Pacific Forum on Sustainable Development 2018, March 25-27, Bangkok," 2, accessed April 5, 2018, http://ada2030.org/bbs/board. php?bo_table=reso1&wr_id=75.
- 26. APRCEM, "People's Forum Statement," 2.
- 27. UNESCAP, Report of the Fifth APFSD.
- 28. UNESCAP, Report of the Fifth APFSD, 7.
- 29. UNESCAP, Report of the Fifth APFSD, 7.
- 30. UNESCAP, Report of the Fifth APFSD, 8. 31. UNESCAP, Report of the Fifth APFSD. 8.
- 32. UNESCAP, Report of the Fifth APFSD, 8-9.
- 33. UNESCAP, Asia and the Pacific SDG Progress Report 2017 (Bangkok: UNESCAP, 2018), ix.
- 34. UNESCAP, Report of the Fifth APFSD, 9.

- 35. UNESCAP, Report of the Fifth APFSD, 9.
- 36. UNESCAP, Report of the Fifth APFSD, 10.
- 37. UNESCAP, Report of the Fifth APFSD, 10.
- 38. UNESCAP, Report of the Fifth APFSD, 10.
- 39. UNESCAP, Report of the Fifth APFSD, 12.
- 40. UNESCAP, Report of the Fifth APFSD, 13.
- 41. UNESCAP, Report of the Fifth APFSD, 12.
- 42. The definition of climate change in this brief is not only limited to the targets in Goal 13 but encompasses the climate change phenomenon and activities that occur in Asia.
- 43. Kirk R. Smith et al., "Human Health: Impacts, Adaptation, and Co-benefits," in Climate Change 2014: Impacts, Adaptation, and Vulnerability; Part A: Global and Sectoral Aspects; Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, eds. Field et al. (Cambridge: Cambridge University Press, 2014), 729.
- 44. The Paris Agreement is considered a landmark document as it was unlike previous climate change agreements, which were merely environment treaties. The Paris Agreement is an environment treaty as well as a "health treaty." This agreement was adopted by all Parties to the United Nations Framework Convention on Climate Change (UNFCCC) at the 21st Conference of Parties (COP21) in Paris in December 2015. The agreement requires the Parties to be duty-bound to reduce the global greenhouse gas emissions by 2020, to strive to keep the global average temperature increase to well below 2°C above pre-industrial levels, and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels. Sources: WHO, "Keynote Address at the Human Rights Council Panel Discussion on Climate Change and the Right to Health," accessed April 29, 2016, http://www.who.int/dg/speeches/2016/human-rights-council/en/, and UNFCCC, Adoption of the Paris Agreement at the 21st Session of Conference of the Parties, Paris, 30 November to 11 December, 2015, 2.
- 45. UNFCCC, Adoption of the Paris Agreement at the 21st Session of Conference of the Parties, Paris, 30 November to 11 December 2015, 2.
- 46. Hwei Mian Lim, Women's Health and Climate Change (Kuala Lumpur: ARROW, 2017), 16, accessed July 31, 2017, http://arrow.org.my/publication/womens-health-climate-change/.
- ARROW, Sexual and Reproductive Health and Rights in the Post-2015 Agenda: Taking Their Rightful Place (Kuala Lumpur: ARROW, 2014), 14.
- 48. "Basic sanitation service" is defined as sanitation facilities where the excreta is not safely managed. Source: WHO and the United Nations Children's Fund (UNICEF), Progress on Drinking Water, Sanitation, and Hygiene: 2017 Update and SDG Baselines (Geneva: WHO and UNICEF, 2017), 8.
- 49. "Improved and safely managed sanitation facilities" is defined as facilities that are not shared with other households and designed to hygienically separate excreta from human contact. Source: WHO and UNICEF, Drinking Water, Sanitation, and Hygiene, 8.
- Data on improved and safely managed sanitation facilities are not available for the four countries
- "Global Health Observatory Data Repository," WHO, accessed March 13, 2018, http://apps. who.int/gho/data/node.main.WSHSANITATION?lang=en.
- 52. WHO and UNICEF, Drinking Water, Sanitation, and Hygiene, 58, 66, 72, 74, 84, 90, 92.
- 53. Lim, Women's Health and Climate Change, 10.
- 54. WHO, Atlas of Health and Climate (Geneva: WHO, 2012), 12.
- ARROW, Identifying Opportunities for Action on Climate Change and Sexual and Reproductive Health and Rights in Bangladesh, Indonesia, and the Philippines (Kuala Lumpur: ARROW, 2014): 22, 27.
- 56. Sanitation and Hygiene Applied Research for Equity (SHARE), "Wash & Clean: A Situation Analysis of Hygiene on Maternity Wards in India and Bangladesh," London School of Hygiene and Tropical Medicine (January 2015): 1.
- 57. Lim, Women's Health and Climate Change, 10.
- $58. \ \, \text{Lim, Women's Health and Climate Change, 10-11}.$
- 59. WHO, Gender, Climate Change, and Health (Geneva: WHO, 2014), 15, 18.
- 60. WHO, *Atlas*, 12.
- 61. ARROW, Right Here, Right Now, Youth LEAD, APRCEM, and YPEER, Young People's Vision for a Sustainable, Resilient, and Inclusive Asia Pacific: Report of the Asia Pacific Forum on Sustainable Development Youth Forum, An Official Preparatory Meeting for APFSD, 23-24 March 2018 (Kuala Lumpur: ARROW, 2018), 35.
- 62. WHO, Gender, Climate Change, and Health, 53.
- 63. Lim, Women's Health and Climate Change, 10.
- 64. Dewi Candraningrum, Ahmad Badawi, and Ina Hunga, A Scoping Study: Mainstreaming Policy in Central Java, Indonesia (Jakarta: Yayasan Jurnal Perempuan, 2015), 24, accessed March 3, 2016, http://arrow.org.my/wp-content/uploads/2016/05/Climate-Change-and-SRHR-Scoping-Study Indonesia.pdf.
- 65. Hwei Mian Lim and Mangala Namasivayam, Sex, Rights, Gender in the Age of Climate Change (Kuala Lumpur: ARROW, 2017), 16, accessed March 14, 2018, http://arrow.org.my/ publication/sex-rights-gender-age-climate-change/.
- 66. UNESCAP, Assessment of Progress in the Implementation of Sustainable Development Goals 6, 7, 11, 12, 15 and 17 at the Regional Level; Note by the Secretariat; 5th Asia-Pacific Forum on Sustainable Development, Bangkok, 28-30 March, 2018, 6-7.

- 67. "The Human Right to Water and Sanitation," UN, accessed June 13, 2018, http://www.un.org/waterforlifedecade/human_right_to_water.shtml.
- For other recommendations related to sex-disaggregated data, please refer to the section in Goal 17 Recommendations, particularly on Systemic Issues: Data, Monitoring, and Accountability.
- This refers to not using solid fuels (e.g., wood, charcoal, coal, dung, and crop wastes) and kerosene for cooking.
- 70. "Global Health Observatory Data Repository."
- 71. Solid fuels refer to wood, charcoal, coal, dung, and crop wastes.
- 72. Jianmin Chen et al., "A Review of Biomass Burning: Emissions and Impacts on Air Quality, Health and Climate in China," Science of the Total Environment 579 (2017): 1000.
- K. L. Chan, "Biomass Burning Sources and Their Contributions to the Local Air Quality in Hong Kong," Science of the Total Environment 596-597 (2017): 212-213.
- 74. "Global Health Observatory Data Repository."
- 75. "Global Health Observatory Data Repository."
- 76. "Global Health Observatory Data Repository."
- 77. Lim and Namasivayam, Sex, Rights, Gender, 14.
- 78. In Asia and the Pacific, solid biomass fuels (traditional) (70%) and modern fuels (10%) comprise the largest share in the total consumption of renewable energy. Traditional biomass is considered unsustainable as it uses wood, dung, and agriculture residues in simple stoves with very low combustion efficiencies. Source: Asian Development Bank (ADB), Sustainable Energy for All: Tracking Progress in Asia and the Pacific—A Summary Report (Manila: ADB, 2015), 21.
- 79. Key biomass burning pollutants are small particulates, as well as nitrogen oxides (NOx) and volatile organic compounds (VOCs). Source: Green Climate Fund (GCF) Civil Society Biomass Working Group, Biomass Energy and the GCF; Briefing Note, February 19, 2018.
- W. L. Beeson et al., "Long-term Concentrations of Ambient Air Pollutants and Incident Lung Cancer in California Adults: Results from AHSMOG Study," *Environmental Health Perspectives* 106, No. 12 (1998): 813.
- 81. Beeson et al., 820
- 82. WHO, "Household Air Pollution and Health Factsheet," updated February 2016, accessed April 29, 2016, http://www.who.int/mediacentre/factsheets/fs292/en/#.
- 83. ADB, Sustainable Energy for All, 21.
- 84. Traditional biomass is considered an unsustainable source as it uses wood, dung, and agriculture residues in simple stoves with very low combustion efficiencies. Source: World Bank, Sustainable Energy for All 2015: Progress Towards Sustainable Energy (Washington D.C., World Bank, 2015).
- 85. ADB, Sustainable Energy for All, 21.
- 86. Detlef Virchow et. al., "The Value Web Approach—So That the South Can Also Benefit from Bioeconomy," *Rural* 21 (September 8, 2014), 16.
- 87. Anna Mohr et. al., "Food Security Criteria for Voluntary Biomass Sustainability Standards and Certifications," *Biomass and Bioenergy* 89 (2016): 133.
- Ajay Chhibber et al., The Global Financial Crisis and the Asia-Pacific Region: A Synthesis Study Incorporating Evidence from Country Case Studies (Colombo, UNDP Regional Centre for Asia and the Pacific, 2009).
- 89. Lim, Women's Health and Climate Change, 13.
- 90. WHO, Gender, Climate Change, and Health, 17.
- 91. "Gender and Nutrition," Food and Agriculture Organisation (FAO), accessed September 21, 2016, http://www.fao.org/docrep/o12/al184e/al184eoo.pdf.
- ENERGIA, World Bank Group/ESMAP and UN Women, Policy Brief #12: Global Progress of SDG7—Energy and Gender (draft for public consultation), February 13, 2018, 3.
- 93. UNESCAP, Assessment of Progress in the Implementation of SDGs, 8.
- 94. ENERGIA et al., Policy Brief #12, 2.
- 95. WHO, Atlas, 52.
- Sustainable Energy for All (SEforALL), Opening Doors: Mapping the Landscape for Sustainable Energy, Gender Diversity, and Social Inclusion (Vienna: Sustainable Energy for All, 2017).
- 97. In 2017, the Green Climate Fund approved the project, "Ground Water Recharge and Solar Micro-irrigation to Ensure Food Security and Enhance Resilience in Vulnerable Tribal Areas of Odisha," submitted by the National Bank for Agriculture and Rural Development (NABARD), India. See Endnote 31 for detailed information.
- 98. Since 2015, the Women and Gender Constituency (WGC) of the UNFCCC has been highlighting innovative women-led initiatives (e.g., clean cookstoves and solar lights) and giving out the Gender Just Climate Solutions Award at the COP. Source: Women and Gender Constituency, Gender Just Climate Solutions, 3rd ed. (WECF, 2017), accessed March 22, 2018, http://www.wecf.eu/download/2017/11-November/WGCSolutionsPublicationCOP23ENGFinal.pdf.
- 99. WHO and UNICEF, Drinking Water, Sanitation, and Hygiene, 58, 66, 72, 74, 59, 67, 73, 75.
- 100. Migration to urban areas could include migration within the country or across borders.
- 101. ActionAid, Climate Change Knows No Borders: An Analysis of Climate Induced Migration, Protection Gaps, and Need for Solidarity in South Asia (Johannesburg: ActionAid International Secretariat, 2016), 10.

- 102. Dulamsuren Jigjid, "Removing Communication Barriers: Accessing Comprehensive Reproductive Health Services for Deaf Women and Girls," ARROW for Change 23, No. 3 (2017): 8-9.
- 103. ARROW's side event on "Gender Responsive, Inclusive, and Safe Space for Women for Resilient and Sustainable Cities" at the 9th World Urban Forum, February 7-13, 2018, Kuala Lumpur.
- 104. The New Urban Agenda (NUA) was adopted at the Habitat III Conference in Quito in 2016 and endorsed by the 71st Session of the General Assembly at the same year. The NUA is "committed to sustainable urban development as a critical step for realising sustainable development in an integrated and coordinated manner at the global, regional, national, subnational, and local levels, with the participation of all relevant actors." The NUA is coherent with the 2030 Agenda, particularly Goal 11. Source: Habitat III Secretariat, New Urban Agenda (UN, 2017), 4, accessed June 25, 2018, http://habitat3.org/wp-content/uploads/NUA-English.pdf.
- 105. For example, the infamous case of the gang-rape of Jyoti Singh in New Delhi in 2012, which happened while she was taking transportation to go home one night.
- 106.Despite the large number of rape cases reported in New Delhi, rape cases in this city are still believed to be underreported.
- 107. Rachael Revesz, "New Delhi and Sao Paolo Worse Places in the World for Sexual Violence against Women, Shows Study," *Independent*, October 16, 2017, accessed June 8, 2018, https://www.independent.co.uk/news/world/asia/new-dehli-sao-paolo-women-sexual-violence-worst-place-world-india-capital-brazil-a8002541.html.
- 108. Not all sex workers, domestic workers, and those working in informal jobs are forced or trafficked. The complexities of migration and linking that to trafficking and sex work is not dealt with in this brief.
- 109. Candraningrum, Badawi, and Hunga, A Scoping Study, 24.
- 110. ActionAid, Climate Change Knows No Borders, 17.
- 111. "Feminisation of Migration: Situation Report; International Migration in South and Southwest Asia," UNESCAP, accessed June 8, 2018, http://sitreport.unescapsdd.org/gender/feminization-migration.
- 112. AFP, "Brides for Sale: Trafficked Vietnamese Girls Sold into Marriage in China," The Guardian, 29 June, 2017, accessed June 8, 2018, https://www.theguardian.com/global-development/2014/jun/29/brides-for-sale-trafficked-vietnamese-girls-sold-marriage-china.
- 113. Arpita Das, Universal Access to Sexual and Reproductive Health and Rights; Regional Profile: Asia (Kuala Lumpur: ARROW, 2016), 23-24.
- 114. UNESCAP, Assessment of Progress in the Implementation of SDGs, 9-10.
- 115. Maria Lourdes S. Marin, "When Crossing Borders: Recognising the SRHR of Women Migrant Workers," ARROW for Change 19, No. 1 (2013): 2.
- 116. Marin, "When Crossing Borders," 2.
- 117. UNESCAP, Statistical Yearbook for Asia and the Pacific 2015: Sustainable Development Goal 12—Ensure Sustainable Consumption and Production Patterns (Bangkok: UNESCAP, 2015), 1.
- 118. UNESCAP, Statistical Yearbook for Asia and the Pacific 2015, 1.
- 119. UNESCAP, Statistical Yearbook for Asia and the Pacific 2015, 1.
- 120. Production and consumption processes generate waste and pollutants.
- 121. ARROW defines food security as "when all people, at all times have physical and economic access to sufficient, safe and nutritious foods that meet their dietary needs and food preferences for an active and healthy life." Source: ARROW, "Linking Poverty, Food Sovereignty and Security, and Sexual and Reproductive Health and Rights," ARROW for Change 20, No. 1 (2014): 31.
- 122. UNESCAP, Statistical Yearbook for Asia and the Pacific 2015, 1.
- 123. "Where Food Loss and Waste Occurs Along the Food Supply Chain Varies Between Regions," Food Loss and Waste Protocol, accessed April 2, 2018, http://flwprotocol.org/why-measure/.
- 124. UNESCAP, Statistical Yearbook for Asia and the Pacific 2015, 9.
- 125. FAO, FAO Statistical Yearbook 2014: Asia and the Pacific Food and Agriculture (Bangkok: FAO, 2014), 14.
- 126. ARROW defines "malnutrition" as an "abnormal physiological condition caused by inadequate, unbalanced, or excessive consumption of macronutrients and/or micronutrients. Malnutrition includes undernutrition and overnutrition as well as micronutrient deficiencies." However, for this brief, the focus will only be on undernutrition and micronutrient deficiencies resulting from lack of food security. Source: ARROW, ARROW for Change 20, No. 1 (2014): 31.
- 127. "Gender and Nutrition," FAO.
- 128. WHO, Gender, Climate Change, and Health, 3.
- 129. Rose E. Frisch, "The Right Weight: Body Fat, Menarche and Fertility," *Proceedings of the Nutrition Society* 53 (1994): 113.
- 130. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
- 131. Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.
- 132. Stockholm Convention on Persistent Organic Pollutant.
- 133. "Basel Convention National Reports," Basel Convention, accessed April 3, 2018, http://www.basel.int/Countries/NationalReporting/NationalReports/tabid/4250/Default.aspx.

- 134. Basel Convention National Reports."
- 135. Basel Convention National Reports."
- 136. UNESCAP, Assessment of Progress in the Implementation of SDGs, 11.
- 137. Hijioka et al., "Asia," 1347.
- 138. FAO, Global Food Losses and Food Waste: Extent, Causes and Prevention (Rome: FAO, 2011), v.
- 139. Narimah Awin, "Bridging the Divide: Linking Poverty Eradication, Food Sovereignty and Security, and Sexual and Reproductive Health and Rights," ARROW for Change 20, No. 1 (2014): 5.
- 140. Lim, Women's Health and Climate Change, 12.
- 141. Parties discuss women's vulnerability, e.g., to gender-based discrimination, or identify women's unique vulnerability to chemicals and waste. Source: Molly Gilligan and Laura Sabater, Women's Participation and Gender Considerations in Country Representation, Planning, and Reporting to the BRS Conventions (Washington D.C., IUCN, 2017), 11.
- 142. Parties discuss programmes/policies that include women as recipients of economic, social, or other benefits, including educational and capacity-building opportunities. Source: Gilligan and Sabater, Women's Participation, 11.
- 143. Parties discuss women as decision-makers or as a group targeted for participation in decision-making. Source: Gilligan and Sabater, Women's Participation, 11.
- 144. The National Implementation Plans (NIPs) are a requirement by the Stockholm Convention on Persistent Organic Pollutants from its signatories.
- 145. Gilligan and Sabater, Women's Participation, 22.
- 146.Parties describe women as driving activities or having a voice in policy change or action. Source: Gilligan and Sabater, Women's Participation, 11.
- 147. Household food hierarchy systems applies mainly to South Asian countries.
- 148. Awin, "Bridging the Divide," 6.
- 149. Hijioka et al., "Asia," 1332.
- 150. Hijioka et al., "Asia," 1332.
- 151. Hijioka et al., "Asia," 1332.
- 152. Carol Hunsberger et. al., "Livelihood Impacts of Biofuel Crop Production: Implications for Governance," Geoforum 54 (2014):248-260.
- 153. Anna Mohr. et. al., "Food Security Criteria for Voluntary Biomass Sustainability Standards and Certifications," Biomass and Bioenergy 89 (2016): 139.
- 154. UNESCAP, Assessment of Progress in the Implementation of SDGs, 12-13.
- 155. "Country Profiles," Social Institutions and Gender Index, accessed March 29, 2018, https://www.genderindex.org/countries/.
- 156. "Country Profiles."
- 157. Kajal Bhardwaj, "Trade Agreements, SDGs, and Universal Access to SRHR," ARROW for Change, 23, No. 2 (2017): 9-10, accessed June 25, 2018, http://arrow.org.my/wp-content/ uploads/2017/08/AFC-23_2_2017-WEB-2.pdf.
- 158. This should encompass the citizens and non-citizens in the country.
- 159. For example, the Comprehensive and Progressive Trans-Pacific Partnership (CPTPP).
- 16o. Examples include the National Adaptation Plans (NAPs), National Adaptation Programmes of Action (NAPAs), and Nationally Appropriate Mitigation Actions (NAMAs).

BIBLIOGRAPHY

- ActionAid. Climate Change Knows No Borders; An Analysis of Climate Induced Migration,
 Protection Gaps, and Need for Solidarity in South Asia. Johannesburg: ActionAid International
 Secretariat. 2016.
- Adger, W. Neil, Nigel W. Arnell, and Emma L. Tomkins. "Successful Adaptation to Climate Change Across Scales." Global Environment Change 15, Issue 2 (July 2005): 77-86. https://doi.org/ 10.1016/j.gloenvcha.2004.12.005.
- AFP. "Brides for Sale: Trafficked Vietnamese Girls Sold into Marriage in China." *The Guardian*, June 29, 2017. Accessed June 8, 2018. https://www.theguardian.com/global-development/2014/jun/29/brides-for-sale-trafficked-vietnamese-girls-sold-marriage-china.
- Asia Pacific Regional CSO Engagement Mechanism (APRCEM). "People's Forum Statement for Asia Pacific Forum on Sustainable Development 2018, March 25-27, Bangkok, Thailand." Accessed April 5, 2018. http://ada2030.org/bbs/board.php?bo_table=reso1&wr_id=75.
- Asian Development Bank (ADB). Sustainable Energy for All: Tracking Progress in Asia and the Pacific—A Summary Report. Manila: ADB, 2015.
- Asian-Pacific Resource & Research Centre for Women (ARROW). "Asia-Pacific Youth Call to Action; Preparatory Youth Forum for the Asia-Pacific Forum on Sustainable Development (APFSD) 2017, Bangkok, 23-25 March 2017." Accessed May 23, 2018. http://arrow.org.my/publication/asia-pacific-youth-forum-call-action-pre-apfsd-2017-sustainable-solutions-eradicate-poverty-promote-prosperity/.
- ARROW. Identifying Opportunities for Action on Climate Change and Sexual and Reproductive Health and Rights in Bangladesh, Indonesia, and the Philippines. Kuala Lumpur: ARROW, 2014. Accessed March 3, 2018. http://arrow.org.my/wp-content/uploads/2015/04/Climate-Change-and-SRHR-Scoping-Study_Working-Paper_2014.pdf.
- ARROW. "Linking Poverty, Food Sovereignty and Security, and Sexual and Reproductive Health and Rights." ARROW for Change 20, No. 1, 2014.
- ARROW. Sexual and Reproductive Health and Rights in the Post-2015 Agenda: Taking Their Rightful Place. Kuala Lumpur: ARROW, 2014.
- ARROW, Right Here, Right Now, Youth LEAD, APRCEM, and YPEER. Young People's Vision for a Sustainable, Resilient and Inclusive Asia Pacific: Report of the Asia Pacific Forum on Sustainable Development Youth Forum, An Official Preparatory Meeting for Asia-Pacific Forum on Sustainable Development (APFSD), Bangkok, 23-24 March, 2018. Kuala Lumpur: ARROW, 2018.
- Barros, V.R., C.B. Field, D.J. Dokken, M.D. Mastrandrea, K.J. Mach, T.E. Bilir, M.Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCacken, P.R. Mastrandrea, and L.L. White, eds. Climate Change 2014: Impacts, Adaptation, and Vulnerability; Part B: Regional Aspect; Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press, 2014.
- Basel Convention. "Basel Convention National Reports." Accessed April 3, 2018. http://www.basel.int/Countries/NationalReporting/NationalReports/tabid/4250/Default.aspx.
- Beeson, W. L., D.E. Abbey, and S.F. Knutsen. "Long-term Concentrations of Ambient Air Pollutants and Incident Lung Cancer in California Adults: Results from AHSMOG Study." *Environmental Health Perspectives* 106, No. 12 (1998):813-822.
- Bhardwaj, Kajal. "Trade Agreements, SDGs, and Universal Access to SRHR." ARROW for Change, 23, No. 2 (2017): 9-1. Accessed June 25, 2018. http://arrow.org.my/wp-content/uploads/2017/08/AFC-23_2_2017-WEB-2.pdf.
- Blomstrom, Eleanor, Sarah Cunningham, Nadia Johnson, and Cate Owren. Climate Change Connections: A Resource Kit on Climate, Population and Gender. New York: UNFPA and WEDO, 2009. Accessed March 3, 2016. https://www.unfpa.org/public/publications/pid/a088
- Candraningrum, Dewi, Ahmad Badawi, and Ina Hunga. A Scoping Study: Mainstreaming Policy in Central Java, Indonesia. Jakarta: Yayasan Jurnal Perempuan, 2015. Accessed March 3, 2016. http://arrow.org.my/wp-content/uploads/2016/05/Climate-Change-and-SRHR-Scoping-Study_Indonesia.pdf.
- Chan, K. L. "Biomass Burning Sources and Their Contributions to the Local Air Quality in Hong Kong." Science of the Total Environment 596-597 (2017): 212-213.
- Chen, Jianmin, Chunlin Li, Zoran Ristovski, Andelija Milic, Yuantong Gu, Mohammad S. Islam, Shuxiao Wang, Jiming Hao, Hefeng Zhang, Congrong He, Hai Guo, Hongbo Fu, Branka Miljevic, Lidia Morawska, Phong Thai, Yun Fat Lam, Gavin Pereira, Aijun Ding, Xin Huang, and Umesh C. Dumka. "A Review of Biomass Burning: Emissions and Impacts on Air Quality, Health and Climate in China." Science of the Total Environment 579 (2017): 1000-1034.
- Chhibber, Ajay, Jayati Ghosh, and Thangavel Palanivel. The Global Financial Crisis and the Asia-Pacific Region: A Synthesis Study Incorporating Evidence from Country Case Studies. Colombo: UNDP Regional Centre for Asia and the Pacific, 2009.
- Das, Arpita. Universal Access to Sexual and Reproductive Health and Rights; Regional Profile: Asia. Kuala Lumpur: ARROW, 2016.
- ENERGIA, World Bank Group/ESMAP, and UN Women. *Policy Brief #12: Global Progress of SDG7—Energy and Gender* (draft for public consultation), February 13, 2018.

- Field, C. B., V. Barros, T. F. Stocker, D. Qin, D. J. Dokken, K. L. Ebi, M. D. Mastrandrea, K. J. Mach, G. K. Plattner, S. K. Allen, M. Tignor, and P. M. Midgley, eds. Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation: A Special Report of Working Groups I and II of the IPPC. Cambridge: Cambridge University Press, 2012.
- Food and Agriculture Organisation (FAO). FAO Statistical Yearbook 2014: Asia and the Pacific Food and Agriculture. Bangkok: FAO, 2014.
- FAO. "Gender and Nutrition." Accessed September 21, 2016. http://www.fao.org/docrep/012/al184e/al184eoo.pdf.
- FAO. Global Food Losses and Food Waste: Extent, Causes, and Prevention. Rome: FAO, 2011.

 Food Loss and Waste Protocol. "Where Food Loss and Waste Occurs Along the Food Supply Chain
- Food Loss and Waste Protocol. "Where Food Loss and Waste Occurs Along the Food Supply Chain Varies Between Regions." Accessed April 2, 2018. http://flwprotocol.org/why-measure/.
- Frisch, Rose E. "The Right Weight: Body Fat, Menarche and Fertility." *Proceedings of the Nutrition Society* 53 (1994): 113-129.
- Gilligan, Molly and Laura Sabater. Women's Participation and Gender Considerations in Country Representation, Planning and Reporting to the BRS Conventions. Washington D.C.: IUCN, 2017.
- Green Climate Fund (GCF) Civil Society Biomass Working Group. *Biomass Energy and the GCF*. Briefing Note. February 19, 2018.
- Habitat III Secretariat. New Urban Agenda. UN, 2017. Accessed June 25, 2018. http://habitat3.org/ wp-content/uploads/NUA-English.pdf.
- Hugo, Graeme. World Migration Report 2015: Urban Migration Trends, Challenges, Responses and Policy in the Asia-Pacific; Background Paper. Adelaide: International Organisation for Migration (IOM), 2014. Accessed May 16, 2018. https://www.iom.int/sites/default/files/ WMR-2015-Background-Paper-GHugo.pdf.
- Hunsberger, Carol, Simon Bolwig, Esteve Corbera, and Felix Creutzig. "Livelihood Impacts of Biofuel Crop Production: Implications for Governance." *Geoforum* 54 (2014): 248-260.
- Jigjid, Dulamsuren. "Removing Communication Barriers: Accessing Comprehensive Reproductive Health Services for Deaf Women and Girls." ARROW for Change 23, No. 3 (2017): 8-9.
- Lim, Hwei Mian. Women's Health and Climate Change. Kuala Lumpur: ARROW, 2017. Accessed July 31, 2017. http://arrow.org.my/publication/womens-health-climate-change/.
- Lim, Hwei Mian and Mangala Namasivayam. Sex, Rights, Gender in the Age of Climate Change. Kuala Lumpur: ARROW, 2017. Accessed March 14, 2018. http://arrow.org.my/publication/sex-rights-gender-age-climate-change/.
- Mach, K. J., S. Planton, and C. von Stechow, eds. Climate Change 2014: Synthesis Report;
 Contribution of Working Group I, II, and III to the Fifth Assessment Report of the IPCC, 117-130. Cambridge: Cambridge University Press, 2014.
- Marin, Maria Lourdes S. "When Crossing Borders: Recognising the SRHR of Women Migrant Workers." ARROW for Change 19, No. 1 (2013): 2-5.
- Mohr, Anna, Tina Beuchelt, Rafael Schneider, and Detlef Virchow. "Food Security Criteria for Voluntary Biomass Sustainability Standards and Certifications." *Biomass and Bioenergy* 89 (2016): 133-145.
- National Oceanic and Atmospheric Administration, USA. "What are El Niño and La Niña?" Accessed August 12, 2016. http://oceanservice.noaa.gov/facts/ninonina.html.
- Nicholls, Robert J. and Anny Cazenave. "Sea-level Rise and Its Impact on Coastal Zones." Science 328 (2010): 1517-1520.
- Pan American Health Organization. Renewing Primary Health Care in the Americas: A Position Paper of the Pan American Health Organization/World Health Organization (PAHO/WHO).

 Washington D.C.: PAHO, 2007. Accessed March 15, 2012. http://apps.who.int/medicinedocs/documents/s19055en/s19055en.pdf.
- Revesz, Rachael "New Delhi and Sao Paolo Worse Places in the World for Sexual Violence against Women, Shows Study." *Independent*, October 16, 2017. Accessed June 8, 2018. https://www.independent.co.uk/news/world/asia/new-dehli-sao-paolo-women-sexual-violence-worst-place-world-india-capital-brazil-a8002541.html.
- Sanitation and Hygiene Applied Research for Equity (SHARE). "Wash & Clean: A Situation Analysis of Hygiene on Maternity Wards in India and Bangladesh." London: London School of Hygiene and Tropical Medicine, January, 2015.
- Social Institutions and Gender Index. "Country Profiles." Accessed March 29, 2018. https://www.genderindex.org/countries/.
- Sustainable Energy for All (SEforALL). Opening Doors: Mapping the Landscape for Sustainable Energy, Gender Diversity, and Social Inclusion. Vienna: Sustainable Energy for All, 2017.
- The Pew Center on Global Climate Change and the Pew Center on the States. Climate Change 101: Adaptation. Arlington, V.A. and Washington D.C.: Pew Charitable Trusts, 2008. Accessed March 3, 2016. http://www.pewtrusts.org/en/research-and-analysis/reports/2008/02/25/climate-change-101-adaptation.
- United Nations (UN). "'El Niño is Not a One-off Event,' UN Says, Calling for Action to Address Phenomenon's Impacts," *UN News Centre*, 2016. Accessed May 20, 2016. http://www.un.org/apps/news/story.asp?NewsID=53877#.
- UN. "The Human Right to Water and Sanitation." Accessed June 13, 2018. http://www.un.org/waterforlifedecade/human_right_to_water.shtml.
- United Nations Department of Economic and Social Affairs (UNDESA). "High-level Political Forum." Accessed June 14, 2018. https://sustainabledevelopment.un.org/hlpf.
- UNDESA. "HLPF 2018." Accessed May 16, 2018. https://sustainabledevelopment.un.org/hlpf/2018.

- UNDESA. "Youth Population Trends and Sustainable Development." *Population Facts* No. 2015/1 (May 2015). Accessed May 16, 2018. http://www.un.org/esa/socdev/documents/youth/fact-sheets/YouthPOP.pdf.
- UNDESA. "Voluntary Reviews National Database." Accessed June 14, 2018. https://sustainabledevelopment.un.org/vnrs/.
- United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). Asia and the Pacific SDG Progress Report 2017. Bangkok: UNESCAP, 2018.
- UNESCAP. Assessment of Progress in the Implementation of Sustainable Development Goals 6, 7, 11, 12, 15, and 17 at the Regional Level; Note by the Secretariat, 5th Asia-Pacific Forum on Sustainable Development (APFSD), Bangkok, 28-30 March, 2018.
- UNESCAP. "Feminisation of Migration: Situation Report; International Migration in South and South-west Asia." Accessed June 8, 2018. http://sitreport.unescapsdd.org/gender/feminization-migration.
- UNESCAP. Report of the Fifth Asia-Pacific Forum on Sustainable Development, Bangkok, 28-30
 March, 2018.
- UNESCAP. Statistical Yearbook for Asia and the Pacific 2015: Sustainable Development Goal 12— Ensure Sustainable Consumption and Production Patterns. Bangkok: UNESCAP. 2015.
- United Nations Framework for Convention on Climate Change (UNFCCC). Adoption of the

 Paris Agreement at the 21st session of Conference of the Parties, Paris, 30 November to 11

 December 2015.
- United Nations Office for Disaster Risk Reduction (UNISDR). "Vulnerability." PreventionWeb. Accessed March 22, 2018. https://www.preventionweb.net/english/professional/terminology/v.php?id=508.
- United Nations Population Fund (UNFPA). A Report of the Conference on Advocating for
 Universal Access to Reproductive Health Services and Commodity Security, 28-30 July 2009,
 Kathmandu, Nepal. Bangkok: UNFPA, 2009. Accessed March 14, 2012, http://asiapacific.
 unfpa.org/sites/default/files/pub-pdf/RHCS.pdf.
- UNFPA. International Conference on Population and Development Programme of Action; Adopted at the International Conference on Population and Development, Cairo, 5-13 September 1994.

 New York: UNFPA, 1994.
- Virchow, Detlef, Tina Beuchelt, Manfred Denich, Tim K. Loos, Marlene Hoppe, and Armin Kuhn.

 "The Value Web Approach—So That the South Can Also Benefit from Bioeconomy." Rural 21

 (September 8, 2014), 16-18.
- Women and Gender Constituency. *Gender Just Climate Solutions*, 3rd ed. WECF, 2017.

 Accessed March 22, 2018. http://www.wecf.eu/download/2017/11-November/
 WGCSolutionsPublicationCOP23ENGFinal.pdf.
- World Health Organization (WHO). Atlas of Health and Climate. Geneva: WHO, 2012.
- WHO. "Gender and Human Rights." Accessed June 21, 2018. http://www.who.int/reproductivehealth/topics/gender_rights/sexual_health/en/.
- WHO. Gender, Climate Change, and Health. Geneva: WHO, 2014.
- WHO. "Global Health Observatory Data Repository." Accessed March 13, 2018. http://apps.who. int/pho/data/node.main.WSHSANITATION?lang=en.
- WHO. "Household Air Pollution and Health Factsheet." Accessed April 29, 2016. http://www.who.int/mediacentre/factsheets/fs292/en/#.
- WHO. "Keynote Address at the Human Rights Council Panel Discussion on Climate Change and the Right to Health," Geneva, 3 March, 2016. Accessed April 29, 2016. http://www.who.int/dg/speeches/2016/human-rights-council/en/.
- WHO. National-level Monitoring of the Achievement of Universal Access to Reproductive Health:
 Conceptual and Practical Considerations and Related Indicators; Report of a WHO/UNFPA
 Consultation, 13-15 March 2007. Geneva: WHO, 2007. Accessed March 15, 2012, http://apps.
 who.int/iris/bitstream/handle/10665/43920/9789241596831_eng.pdf;jsessionid=8066C174C
 C64DC98BDEEF443BF5D7027?sequence=1.
- WHO and UNICEF. Progress on Drinking Water, Sanitation, and Hygiene: 2017 Update and SDG Baselines. Geneva: WHO and UNICEF, 2017.

championing women's sexual and reproductive rights



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ARROW is a regional and non-profit women's NGO based in Kuala Lumpur, Malaysia, and has consultative status with the Economic and Social Council of the United Nations. Since it was established in 1993, it has been working to advance women's health, affirmative sexuality, and rights, and to empower women through information and knowledge, evidence generation, advocacy, capacity building, partnership building, and organisational development.

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