

AHEAD OF HARM: INTEGRATING GENDERED EARLY WARNING INTO ASEAN'S WPS REGIONAL PLAN OF ACTION

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Executive Summary

Southeast Asia is entering a period of increasingly complex and interlocking crises, from climate-driven natural disasters and escalating digital harms to recurrent public health emergencies and increasingly multifaceted humanitarian situations. These pressures do not merely disrupt communities; they expose and deepen pockets of state fragility, particularly where gender inequality, weak service delivery and limited institutional responsiveness converge. Women and girls are often at the frontline of these disruptions, as inequalities shape their access to information, essential services and protection.

Early Warning Systems (EWS) are therefore becoming indispensable to understanding and responding to risk. However, conventional systems have not evolved to capture how crises are experienced differently across communities. Most systems do not collect gender-disaggregated data or integrate insights drawn from women's everyday realities. As a result, key indicators of stress, such as rising domestic violence, disrupted maternal healthcare, online harassment or failures in community care, are routinely overlooked. This often signals emerging governance challenges and weakening relations between states and their societies.

The gaps in EWS point to a core limitation within existing early warning systems approaches - they do not incorporate the gender-specific markers that frequently surface before wider instability takes hold. Strengthening early warning systems in ASEAN therefore requires recognising women's experiences as central to understanding the region's broader risk landscape.

Integrating Gendered Early Warning Systems (GEWS) into the ASEAN Women, Peace and Security (WPS) Regional Plan of Action (RPA) is essential for closing this gap. GEWS provide a more accurate picture of vulnerability, improve the ability of institutions to anticipate harm and reinforce state effectiveness by embedding gender responsive analysis into preparedness and response. GEWS also offer an analytical foundation for expanding the WPS agenda into emerging areas of human security, where gendered risks are becoming more visible but remain under examined.

Grounded in the WPS pillars of Prevention, Protection, Participation and Relief and Recovery, this report outlines a framework for GEWS, examines four emerging sites of gendered vulnerability – natural disasters, digital ecosystems, health crises and complex emergencies – and presents recommendations for embedding gender-responsive early warning systems across ASEAN's regional architecture.

Why GEWS Matters for ASEAN?

ASEAN's stability is shaped by converging risks that expose deeper structural vulnerabilities. Climate change intensifies displacement and environmental stress; digital technologies enable new forms of violence and misinformation; pandemics create cascading socio-economic pressures; and localised conflicts intersect with humanitarian challenges. Together, these dynamics shape the resilience and legitimacy of ASEAN Member States.

Gender plays a decisive role in how these risks are experienced. Persistent gaps in sex disaggregated and community level data are not simply technical shortcomings. They are indicators of institutional fragility, revealing where systems are not adequately capturing or responding to lived realities on the ground.

When women's insecurities are not visible in early warning processes, states lose the ability to detect early signs of social tension, rising Gender-based Violence (GBV) or community stress. GEWS allow policymakers to incorporate gender specific indicators such as:

- Increases in domestic and intimate partner violence
- Online harassment and exclusion from digital spaces
- Disruptions in maternal and reproductive health
- Breakdowns in community care systems
- Reduced mobility or access to essential information

These patterns often emerge earlier than traditional conflict or crisis indicators and can reveal underlying weaknesses in governance, trust and service delivery.

The WPS RPA already includes commitments relevant to early warning systems, particularly under the Prevention and Protection pillars. However, these remain broad and lack operational clarity. Embedding GEWS within the RPA would enable ASEAN to translate high-level commitments into practical action, advancing the region's goals under the ASEAN Community Vision 2045 and reinforcing a more inclusive, people centred approach to security.

Climate Security and Natural Disasters: A Case for GEWS

ASEAN is among the world's most disaster-affected regions. Typhoons, floods, landslides and droughts disproportionately affect women, whose mobility, access to resources and communication channels are often constrained. Gender-blind EWS exacerbate these inequalities, contributing to preventable mortality, disrupted health outcomes and increased exposure to GBV.

There are case studies in the wider Pan-Asian region and the Pacific islands that indicate the effectiveness of GEWS in natural disaster management planning. These include:

- Vanuatu, where women led networks such as Women Wetem Weta strengthen preparedness and influence national responses through timely alerts and vulnerability assessments.
- Nepal, where women monitor river gauges and design evacuation routes that consider pregnant women, older people and persons with disabilities.
- The Philippines, where gender inclusion studies in Baguio City highlight delays in women receiving alerts and their under-representation in disaster committees.

The case-studies demonstrate that GEWS strengthen evacuation processes, improve the safety of shelters, support maternal health planning and reduce GBV risks. Mainstreaming GEWS into ASEAN's regional framework would improve preparedness and reduce governance strain during disasters.

Digital Ecosystems: Online Violence as a Security Threat

Digital spaces are becoming new arenas of insecurity. Cyberstalking, doxxing, manipulated imagery, harassment and gendered disinformation are increasingly common, affecting women activists, journalists and political leaders. These harms limit women's ability to participate in public life and erode trust in institutions, which are clear indicators of social and political fragility.

Current cybersecurity approaches in ASEAN focus largely on national security and technological threats, leaving gendered digital risks largely overlooked. A GEWS approach can help identify:

- Co-ordinated digital attacks on women
- Viral misogynistic content
- Algorithmic bias and exclusion
- Gender-targeted disinformation
- Online grooming and trafficking signals

Capturing these indicators strengthens efforts to prevent extremism, reduce polarisation and ensure women's safe and meaningful participation in digital spaces.

Health Crises: A Gendered Blind Spot in Early Warning Systems

The COVID-19 pandemic revealed significant gaps in gender-responsive health security. Women were the primary frontline workforce but were under-represented in decision-making bodies. Lockdowns increased domestic violence, disrupted reproductive health services, and intensified unpaid care burdens - each a gender-specific early warning signal of household stress and institutional strain.

GEWS in health contexts help detect:

- Rises in maternal mortality
- Reduced access to reproductive health services
- Mental health impacts on female frontline workers
- Increases in caregiver burden
- Gendered exposure patterns linked to labour roles
- Household stress linked to violence or economic pressure

Integrating these insights into the WPS RPA would strengthen the region's ability to prepare for and respond to future health emergencies.

Complex Emergencies: Intersecting Risks, Deepening Inequalities

Complex emergencies occur when conflict, displacement, environmental hazards, digital disruption and health crises intersect. Women in these settings face overlapping vulnerabilities, including sexual violence, limited access to safe, secure, and dignified shelter, economic precarity, and barriers to justice.

GEWS add value by integrating multiple streams of information:

- GBV reports
- Displacement and mobility patterns
- Communication disruptions
- Environmental conditions
- Health system performance

By mapping these intersections, GEWS provide early insight into cascading risks, helping ASEAN Member States to respond quickly and prevent deeper governance erosion.

Aligning GEWS with the ASEAN WPS RPA

The WPS RPA already offers a strong foundation for GEWS, through commitments to early warning, humanitarian protection, gender mainstreaming, data strengthening and meaningful participation. Operational guidance, however, remains limited.

ASEAN has the opportunity to scale practices that reinforce gender-responsive early warning systems, including the establishment of women-centred monitoring networks, the adoption of more inclusive and transparent data governance, and the use of diverse communication channels to ensure timely and equitable information flow. Integrating GEWS into the WPS RPA would strengthen coherence across ASEAN's political, economic, and socio-cultural pillars; enhance the quality and rigour of evidence-based policymaking; improve institutional preparedness for emerging risks; align regional action with the ASEAN Community Vision 2045; and support the generation of reliable gender-disaggregated data essential for monitoring resilience and accountability.

Policy Recommendations

Cross-cutting Priorities

1. Strengthen political commitment and institutional capacity to integrate GEWS across ASEAN frameworks.
2. Establish robust data governance standards, including privacy, protection, and consistent disaggregation.
3. Promote cross-sector coordination by engaging state institutions, civil society, and private/tech actors.
4. Mainstream gender analysis throughout early warning systems design, implementation, and governance.
5. Invest in sex-, age-, and disability-disaggregated data, ensuring culturally relevant and life-stage information is retained.
6. Support community-level monitoring by engaging women-led organisations and strengthening participatory local mechanisms.
7. Prioritise community-centred pilots that integrate women's participation by design.

Sector-specific Priorities

Climate Security

- Ensure women's representation in disaster governance.
- Strengthen gender-sensitive preparedness, communication, and shelter systems.
- Collect data on gendered disaster impacts to inform recovery.

Digital Security

- Integrate online GBV prevention into cybersecurity strategies.
- Address gender-differentiated digital risks and enable safe participation.
- Build a regional evidence base on digital harms affecting women.

Health Security

- Mainstream gender, especially gendered health indicators into crisis planning and preparedness.
- Address unpaid care burdens and strengthen gender-sensitive health services.
- Recognise women as central actors in health systems.
- Prioritise women's mental health during and in the aftermath of crises situations.

Complex Emergencies

- Identify layered vulnerabilities in overlapping crises.
- Develop GEWS that track GBV, displacement, and access to essential services.
- Ensure women's meaningful participation in humanitarian planning and recovery.

Conclusion

GEWS offer ASEAN a practical and politically significant tool for detecting early signs of instability, addressing gendered vulnerabilities and strengthening state legitimacy. Integrating gender specific indicators into early warning systems improves prevention, enhances protection and ensures women's meaningful participation in shaping secure and resilient societies.

By embedding GEWS into the ASEAN WPS RPA, the region will be better positioned to anticipate emerging risks, protect vulnerable populations, reinforce institutional resilience and advance a people centred, gender responsive ASEAN Community by 2045.

1. Introduction

In all ages the progress of woman has been an important factor in the civilization of a people. A people that holds its women in contempt is not capable of rising to the highest development. Conversely, where women are honoured and their education is regarded as essential, civilization flourishes.

~ Raden Ajeng Kartini¹~

The ASEAN Women, Peace and Security Regional Plan of Action (WPS RPA) emphasise the protection, participation, and empowerment of women in conflict prevention, peacebuilding, and post-conflict recovery. Over the past decade, ASEAN has attempted to integrate the WPS agenda into its wider political-security and socio-cultural frameworks. While the efforts support women’s critical roles in these frameworks, effective implementation requires not only policy adjustments but also tools and data that can identify and reduce risks, put in place anticipatory action, prevent violence, and strengthen inclusive responses. Here is where *gendered early warning systems* (or GEWS) become vital tools to reconcile the differences between high-level pledges and real-life, on-the-ground phenomena. Gendered early warning systems provide mechanisms to detect risks of conflict and insecurity through a gender lens—capturing threats such as gender-based violence, disproportionate suffering during crises, and online harassment as well as the marginalisation of women’s voices. For the RPA, embedding such systems directly into its WPS architecture ensures that early signals of women’s insecurities are not missed and that women’s experiences are recognised as indicators of broader issues in conflict and instability. In brief, gendered early warning systems form an important foundation for realising the full promise of ASEAN’s WPS agenda.

This chapter introduces the conceptual groundwork of the report, examining the use of indicators to alert and educate decision-makers of the importance of incorporating a gendered analysis in issues of human security, national security and peacebuilding in the Southeast Asian region. In trying to stress the importance of gendered early warning systems and its role in the ASEAN WPS RPA, we needed to ground this attempt in a conceptual framework that

¹ Raden Adjeng Kartini is a Javanese aristocrat and a prominent advocate of women’s rights and female education in Indonesia. She wrote the above in a letter, in Dutch, to her friend Stella Zeehandelaar in 1899. This excerpt is translated from the original Dutch, *Door Duisternis tot Licht [From Darkness into Light]*, published posthumously, in 1911. The English translation, *Letters of a Javanese Princess*, was published in 1920, by publisher, Alfred A. Knopf.

would link the importance of GEWS, WPS and the ASEAN Community Vision 2045. The latter, at the Kuala Lumpur Declaration on ASEAN 2045, the expression of the vision, *Our Shared Future*, is captured in the introduction by the affirmation that:

*We shall place the ASEAN peoples at the heart of our efforts and ensure the meaningful and inclusive participation of all stakeholders in our ASEAN Community-building process.*²

The focus on a people-centred ASEAN and the meaningful and inclusive participation of all stakeholders in a community-building process was an opening to introduce our agenda, as will be revealed in the chapters of this report.

1.1 State effectiveness: a multidimensional typology

In trying to embed this research in a framework that allowed for a deeper examination in how GEWS can help indicate how effective a state is in its ability to provide services to its people while also protecting its authority and legitimacy, the idea of state fragility/statehood was adopted for this study. In particular, how a feminist development/security policy can help demonstrate how different empirical conceptualisations of ‘fragility’ can help uncover potential challenges and opportunities for more comprehensive policymaking. According to Martin-Shields and Koester, a feminist conceptualising of state fragility “can be used to measure and understand state-society, conflict and humanitarian dynamics in myriad ways.”³ It is important to note that perfectly functional states can have pockets of ‘fragility’ at sub-national levels and these, over time, can erode the capacity, legitimacy and authority of the state if left unaddressed. Gender inequality and violence against women qualify as such sub-national fragilities that can happen in what are considered stable states as well. This is what this report is about, focusing on how a new regional framework can assist, through anticipatory action, address potential crises situations.

According to the OECD, state fragility is “the combination of exposure to risks and the insufficient resilience of a state, system and/or community to manage, absorb or mitigate those risks.”⁴ A feminist approach to fragility then is to *capture and show the full range of connections between gender and fragility* – not something that is readily undertaken when trying to

² ASEAN (2025) *ASEAN: Our Shared Future*. ASEAN Secretariat, Jakarta, Indonesia: p15. <https://asean.org/wp-content/uploads/2025/05/ASEAN-2045-Our-Shared-Future.pdf>

³ Martin-Shields, Charles and Diana Koester (2024). *State Fragility and Development Co-operation: Putting Empirics to Use in Policy and Planning*. IDOS Policy Brief. 8/2024. IDOS. <https://doi.org/10.23661/ipb8.2024>

⁴ OECD (2025). *States of Fragility*. 18 February 2025. OECD Publishing, Paris. <https://doi.org/10.1787/81982570-en>

understand the function or dysfunction of states. In the early 2000s, state fragility, emerging from the idea of ‘failed states,’ was conceptualised in terms of a securitised understanding of political and conflict risk, and very much focused on preventing terrorism and transnational threats.⁵ However, for policymaking, a broader, more multidimensional approach was deemed to be more useful. The OECD uses wider coping capacities in six main areas of societal, economic, environmental, security, human and political dimensions.⁶ The OECD also highlights that beyond,

*...armed conflict, multi-layered trends on violence – increased non-state violence, **violence against women**, (for emphasis) high homicide rates and the role of organised crime in and outside of conflict-affected areas – highlight the necessity of preventative action on violence.*⁷

Many other global and regional agencies have adopted this multidimensional definition of what state fragility means (see figure 1.1 below).

OECD	Combination of exposure to risks and the insufficient resilience of a state, system and/or community to manage, absorb or mitigate those risks.
World Bank	Countries and territories are considered fragile if they are affected by violent conflict and/or have weak institutional capacity to deliver basic services, ensure security, or protect citizens. ⁸
UN/UNDP	Fragility reflects deficits in institutional capacity, legitimacy, and authority, which undermine a state’s ability to provide security, development, rule of law, and basic services. ⁹
ADB	The understanding of fragility as a combination of (i) exposure to risk, and (ii) insufficient coping capacity of the state, system, or community to manage, absorb, or mitigate those risks (i.e., resilience capacity). ¹⁰
ASEAN	No official single definition. ASEAN documents use related concepts of resilience, stability, disaster risk, and governance.

Figure 1.1: Definitions of state fragility

⁵ Ibid.

⁶ OECD (2025). *States of Fragility*. 18 February 2025. OECD Publishing, Paris: p 50 <https://doi.org/10.1787/81982570-en>.

⁷ OECD (2025). *States of Fragility*. 18 February 2025. OECD Publishing, Paris: p 14 <https://doi.org/10.1787/81982570-en>

⁸ World Bank (2025) *Classification of Fragile and Conflict-affected Situations*. World Bank brief, 2025. <https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/classification-of-fragile-and-conflict-affected-situations>

⁹ UNDP (2012) *Governance for Peace: Securing the Social Contract*. UN publication. New York, USA: p 35 https://files.acquia.undp.org/public/migration/ly/governance-for-peace_2011-12-15_web.pdf.pdf

¹⁰ ADB (2023). *A Conceptual Idea of Fragility in Asia and the Pacific*. Asian Development Bank, October 2023: p3. <https://www.adb.org/sites/default/files/publication/920606/conceptual-understanding-fragility-asia-pacific.pdf>

The definition of fragility here is expanded to accommodate GEWS and the WPS agenda in the region. The WPS RPA itself has several entry points for early warning indicators, some explicitly mentioned, and others implied in the priority actions that are proposed. The support for this also comes from several ASEAN and international reports that indicate that there is, in fact, a dearth of sex-disaggregated data. The lack of a specific definition of fragility in ASEAN (see figure 1.1) also helps to incorporate a gendered approach since fragility (or effectiveness) in the ASEAN context is often subsumed under broader themes such as capacity, resilience, exposure to economic or environmental shocks. It also plays out at the sub-national level for example, natural disaster hot-spots, insurgencies, or human security issues such as trafficking in persons or transnational crime. This lack of a single definition and the multidimensional, sub-national nature of assessing state effectiveness creates pathways to introduce indicators of fragility in existing regional frameworks, such as the WPS RPA.

The quality of state-society relations is increasingly considered to be pivotal for functioning statehood. This can be cross-referenced to ASEAN's 2045 vision of a people-centred community with meaningful, inclusive participation. People-centred peacebuilding is also *women-centred* peacebuilding. For that to happen, the political will of member states to incorporate a gendered understanding of fragility is vital. Every member state's effectiveness will be profoundly challenged on key issues of global concern such as climate change, increasing inequalities, digital insecurities and in some cases, violent conflict. Having key sex-disaggregated data and gendered early warning systems will help indicate the levels of preparedness in the region for these emerging threats. A good way of assessing this is through the WPS RPA, which is a regional framework germane to all member states.

The lack of essential disaggregated data is itself an indicator. It can be indicative of 'on paper' political inclusivity (or exclusivity, as the case may be), especially in light of much discussion on gender mainstreaming, and siloed intervention, if action is taken. If data is to have any value, it has to be (i) disaggregated into key identified dimensions (as will be discussed in subsequent chapters) and (ii) they will have to be considered in their own right, as well as their complex interaction with other data sets. For example, women's health data will interact with data on emergency preparedness in a community. To not do so would present an inaccurate vignette of real-life phenomena. Not only is it a setback when assessing state-society relations but it is a serious hindrance where women's insecurities are concerned. Such insecurities can also be indicators as they can reflect failures in inclusivity and participation projects. These complex gendered insecurities can be positive proxy indicators for state inefficiencies. Failure to provide basic services, whether education, healthcare, economic opportunities, or safety and freedom to participate in digital space, can indicate increased burden on women and

increased structural and physical violence against women, which then become indicators of an erosion of state authority and capacity.¹¹ The provision of, or changes to these services is what can be monitored through GEWS.

Policymakers must contend with gendered dimensions of rapidly developing challenges and their part in generating gender inequalities. Incidents of state (gendered) ineffectiveness or fragility must be identified via tools like GEWS because states cannot continue to carry out its functions indefinitely without responding to women's needs. This will ultimately compromise state legitimacy or confidence in the state's ability to protect women's rights. State fragility is also a 'neighbourhood issue', which can require regional coordination to manage,¹² for example, sharing gendered data on trafficking in persons. This is an important point because it highlights the usefulness of GEWS in the RPA in helping member states to be effective in addressing crises.

1.2 The problem with indicators – a word on methodology

An indicator is a single data point, measure, or signal that serves as a reference or guide to assess a situation, track progress, or predict future outcomes. We must stress that while GEWS is a useful tool, context becomes very important because we cannot and should not impose indicators created elsewhere with a universality in mind, for any national or sub-national analysis. So, while the RPA is regional framework, specific GEWS must be created bearing in mind the unique conditions of each national or sub-national region or community.

Even if a state is considered stable, fragility can exist at sub-national levels, as mentioned above. A very good example of this is specific gendered insecurities at local levels, across different member states. To capture this nuance, there needs to be greater inclusion in designing indicators that are reflective of sub-national areas and communities. More actors, such as local women's groups, CSOs, local community leadership etc., must have a stake in this process.

Any indicator assessing risks should not be unidimensional and should have nuanced interpretations to better understand underlying conditions, so that proper action can be taken.

¹¹ Gravingholt, Jorn, Sebastian Ziaja and Merle Kreibaum (2012). *State Fragility: Towards a Multi-Dimensional Empirical Typology*. D.I.E. Discussion Paper 3/2012. German Institute of Development and Sustainability (IDOS), Bonn. https://www.idos-research.de/uploads/media/DP_3.2012.pdf

¹² Martin-Shields, Charles and Diana Koester (2024). *State Fragility and Development Co-operation*.

The alternative is to continue to operate without addressing blind spots on statehood and state effectiveness. Hence the need for a *differentiated, gendered view* on state fragility.

1.3 Gendered early warning systems and the ASEAN Women, Peace and Security Regional Plan of Action

In recent years, there has been significant commitment to advance the Women, Peace and Security (WPS) agenda in the ASEAN region. This has been especially noted through the work of sectoral bodies of the ASEAN Socio-Cultural Community (ASCC) and the ASEAN Political-Security Community (APSC) as well as in the ASEAN-UN Plan of Action (2021-2025),¹³ and including other works in both the academic and policy circles and regional studies. Such continuous effort, including work and advocacy from earlier years, has led to the recognition of the importance of a more inclusive approach in addressing both traditional and non-traditional security threats and cross border governance challenges. In particular, the appreciation of the differentiated response of women and men to violence and instability, as well as the acknowledgement of women's key role in establishing peace and security. Concurrently, as mentioned in a 2021 report, *Overview of Gender Responsive Early Warning Systems – Progress and Gaps*, there has also been a greater recognition by WPS and early warning and atrocity prevention experts on the inclusion and strengthening of gender perspectives in approaches such as early warning systems in preventing atrocity crimes, violent extremism and armed conflict.¹⁴ In the same year, the latter recognition was reflected in a region-wide study on the implementation of the WPS agenda in ASEAN.¹⁵ In 2022, the ASEAN Women, Peace and Security Regional Plan of Action (ASEAN WPS RPA) was launched. It provides a good medium to put to test the development and inclusion of gender-specific indicators of early warning in regional and national frameworks as a closer step towards preventing, responding to and monitoring gender-based violence (GBV)¹⁶ in the ASEAN region.

The WPS RPA also allows opportunities to engage with GEWS in areas of emerging threats or new sites of vulnerability for women and girls, specifically GBV embedded within the larger climate crisis and disaster management, and cybercrime (specifically online violence against

¹³ ASEAN (2020). *Plan of Action to Implement the Joint Declaration on Comprehensive Partnership between ASEAN and the United Nations (2021-2025)*. October 22, 2022. ASEAN Secretariat. Jakarta, Indonesia. <https://asean.org/wp-content/uploads/2021/09/ASEAN-UN-POA-2021-2025-final.pdf>

¹⁴ Allen, L. *Overview of Gender Responsive Early Warning Systems – Progress and Gaps*. September 2021. Asia-Pacific Centre for the Responsibility to Protect. University of Queensland

¹⁵ ASEAN, USAID, PROSPECT and UN Women. *ASEAN Regional Study on Women, Peace and Security*. ASEAN Secretariat. Jakarta, Indonesia: 2021.

¹⁶ Gender based Violence (GBV) and Violence against Women (VAW) are used in this report. Where consulted literature states 'Sexual and Gender based Violence' we have retained the original version in writing. It is not used interchangeably with GBV/VAW.

women) in the digital ecosystem. It is hoped that this study will inject greater interest and impetus to action in different security communities regarding the plight of women and girls while at the same time moving the WPS agenda into new areas of application in its 25th year.

1.3.1 What are Early Warning Systems?

Early warning systems or EWS are systems designed to detect, protect, and communicate potential hazards and disasters (both natural and man-made). These systems are crucial in providing alerts in advance of any form of threats to human lives or livelihoods and allow authorities to mitigate risks. According to the United Nations Office of Disaster Risk Reduction (UNDRR), EWS typically involve four key components: risk knowledge, monitoring and warning services, dissemination and communication, and response capability.¹⁷ EWS are used in various fields including disaster risk reduction,¹⁸ public health,¹⁹ conflict prevention,²⁰ and financial markets.²¹

EWS are an important tool within the spectrum of action for crisis prevention, management and resolution.²² The main aim of an EWS is to prevent the escalation of violence that could compromise the safety and integrity of individuals as well as jeopardise stability of the state and affect democratic governance negatively. Its purpose is to warn and pre-empt decision-makers. In addition to warning leaders, it can also monitor compliance with political decisions, such as protective measures for women online or greater inclusion of women in peacebuilding efforts. It can also provide useful information for programmes, projects and public policies that may address immediate and structural causes of violence in society that can result in destabilisation of certain communities' or individual's safety and well-being. It is not a far leap from here to see the usefulness of EWS in aligning with national or regional goals of greater inclusion, participation, and protection of women. However, for this to happen, there needs to be an application of a broad-based understanding of EWS, one that is more gender responsive.

¹⁷ UNDRR. *Early Warning for All*. UNDRR. 2022. <https://www.undrr.org/implementing-sendai-framework/sendai-framework-action/early-warnings-for-all>

¹⁸ Ibid

¹⁹ WHO (2025). *Early Warning, Alert and Response System (EWAR)*. WHO. 2025. <https://www.who.int/emergencies/surveillance/early-warning-alert-and-response-system-ewars>

²⁰ International Crisis Group. *Crisis Early Warning and Horizon Scanning in Today's World*. IGC. 19 September 2024 <https://www.crisisgroup.org/global/crisis-early-warning-and-horizon-scanning-todays-world>

²¹ Chen, S and Katsiaryna Sviryzdenka. *Financial Cycles – Early Warning Indicators of Banking Crises?* IMF Working Paper WP/21/116. IMF April 2021.

²² UNDP (2015). *Early Warning and Response Systems Design for Social Conflicts*. UNDP/OAS, 2015: p10-11

1.3.2 Gendered Early Warning Systems (GEWS)

Gendered Early Warning Systems (GEWS) integrate gender perspectives into early warning mechanisms to identify and respond to risks that disproportionately affect different genders, particularly women. Traditional early warning systems often fail to recognise gender-specific vulnerabilities, making GEWS crucial for more inclusive and effective prevention strategies. GEWS recognises gender-specific risks that women and girls often face in crises, including GBV, economic marginalisation, and disrupted access to healthcare and education.²³ In contexts of gender inequality, people of different genders access, process, interpret, and respond to information in different ways, due to the social and cultural organisation of gender relations and the gendered division of labour.²⁴

GEWS can be carried out or expressed in different ways. For instance, GEWS emphasise the participation of women and gender minorities in designing and implementing early warning systems to ensure diverse perspectives are considered.²⁵ Effective GEWS also relies on disaggregated data (by sex, age, disability, etc.) to understand how different groups experience crises differently²⁶ and many GEWS specifically monitor warning signs of GBV during conflicts, natural disasters, and humanitarian crises. For example, the Global Early Warning Tool for GBV developed by UNFPA tracks indicators such as displacement, armed conflict, and economic stress.²⁷ An earlier study by the ASEAN Intergovernmental Commission on Human Rights (AICHR) revealed that almost all ASEAN member states have in place some form of EWS for disaster management and mitigation, with the inclusion of women as a vulnerable population.²⁸ Although this is not a specific gender-based system, there is precedent for such systems to be in place in the region.

²³ UN Women (2022). *Tool 17: Gender-responsive early warning systems and early action*. UN Women, 2022 <https://wrd.unwomen.org/sites/default/files/2022-07/Tool%2017%20-%20Gender-responsive%20Early%20Warning%20%26%20Early%20Action%20-%2015072022.pdf>

²⁴ UNISDR (2009). *Making Disaster Risk Reduction Gender Sensitive: Policy and Practical Guidelines*. UNISDR, UNDP and IUCN. Geneva, Switzerland, June 2009: p24 https://www.unisdr.org/files/9922_MakingDisasterRiskReductionGenderSe.pdf

²⁵ Coomaraswamy, R. *Preventing Conflict, Transforming Justice, Securing Peace: A Global Study on UNSCR 1325*. UN Women, 2015 https://www.un.org/peacebuilding/sites/www.un.org.peacebuilding/files/documents/globalstudywps_en_web.pdf – under General Guidelines and Recommendations, pp 407 and 413, and other pertinent sections in report.

²⁶ Goemans, Charlotte, Diana Koester and Seve Loudon, 2021. "Gender equality and fragility", OECD Development Co-operation Working Papers, No. 98, OECD Publishing, Paris https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/07/gender-equality-and-fragility_8f6ca305/3a93832b-en.pdf

²⁷ Idris, I. *Best practices in CRSV monitoring and early warning*. K4D Helpdesk Report 1173. Brighton, UK: Institute of Development Studies, 2022. DOI: 10.19088/K4D.2022.126

²⁸ AICHR (2015). *Women in Natural Disasters: Indicative Findings in Unravelling Gender in Institutional Responses: An ASEAN Intergovernmental Commission on Human Rights (AICHR) Thematic Study*. AICHR 2015. https://aichr.org/wp-content/uploads/2019/01/Adopted_AICHR_Thematic_Study_Women_in_Natural_Disasters_26012018.pdf

Examples from other regions, including Africa’s Women’s Situation Room²⁹, the EU’s gender-sensitive early warning mechanisms³⁰, and the global GBV Information Management System³¹, demonstrate the value of incorporating gendered risks into early warning. ASEAN can apply similar approaches by embedding GEWS into the WPS RPA to detect, monitor, and address threats of violence against women.

Figure 1.2 below, adapted from Brown et. al.,³² can be used to highlight where decision makers or policy makers in the ASEAN region might be positioned (at different ‘levels’) in terms of gender sensitivity or awareness *viz.* risk assessment, including preventing and monitoring risks of violence against women. From figure 1.2, a gender unaware approach will likely be gender unequal, increasing the marginalisation and vulnerability of disenfranchised gender groups who have less power and influence. Therefore, taking a gender aware, gender sensitive, or preferably gender transformative approach is vital; analysing, acknowledging, and understanding how gender impacts the effectiveness of EWS, and then taking proactive steps to ensure EWS deliver for all. It is important to note that a gender unaware approach might not necessarily reflect a wilful suppression of gender-based data or experience in the region. Rather, it indicates a type of ‘non-knowledge’³³ – something not considered important because of ignorance or simply the lack of gender-disaggregated data. This then points to the importance of having gender-sensitive/gender aware indicators of risks – or gendered early warning systems – that can help identify, monitor, and address risks to the safety and well-being of women.

²⁹ UN Women (2015). *Women’s Situation Rooms boost peaceful voting in Africa*. UN Women, 9 February, 2015 <https://www.unwomen.org/en/news/stories/2015/10/womens-situation-rooms-boost-peaceful-voting-in-africa>

³⁰ European Institute for Gender Equality. *Risk assessment and risk management*. UIGC 2025 <https://eige.europa.eu/gender-based-violence/risk-assessment-risk-management/risk-management-principles-and-recommendations>

³¹ UNHCR (2025). *Gender-based violence toolkit*. UNHCR 2025 [online] <https://www.unhcr.org/gbv-toolkit/information-management/>

³² Brown, Sarah; Mirianna Budimir; Alison Sneddon; David Lau; Puja Shakya, and Sujana Upadhyay Crawford. (2019) *Gender Transformative Early Warning Systems: Experiences from Nepal and Peru*. Rugby, UK: Practical Action: p10 https://wrd.unwomen.org/sites/default/files/2021-11/GENDER~1_1.PDF Diagram in source (note12) is adapted from: Dwyer, E. and Woolf, L. (2018) *Down by the River: Addressing the Rights, Needs and Strengths of Fijian Sexual and Gender Minorities in Disaster Risk Reduction and Humanitarian Response*. Oxfam, Australia <https://www.edgeeffect.org/wpcontent/uploads/2019/03/Down-By-The-River-May2018.pdf>

³³ Claudia Aradau, “Assembling (Non)Knowledge: Security, Law, and Surveillance in a Digital World”, *International Political Sociology* 11 (2017): pp. 327–342

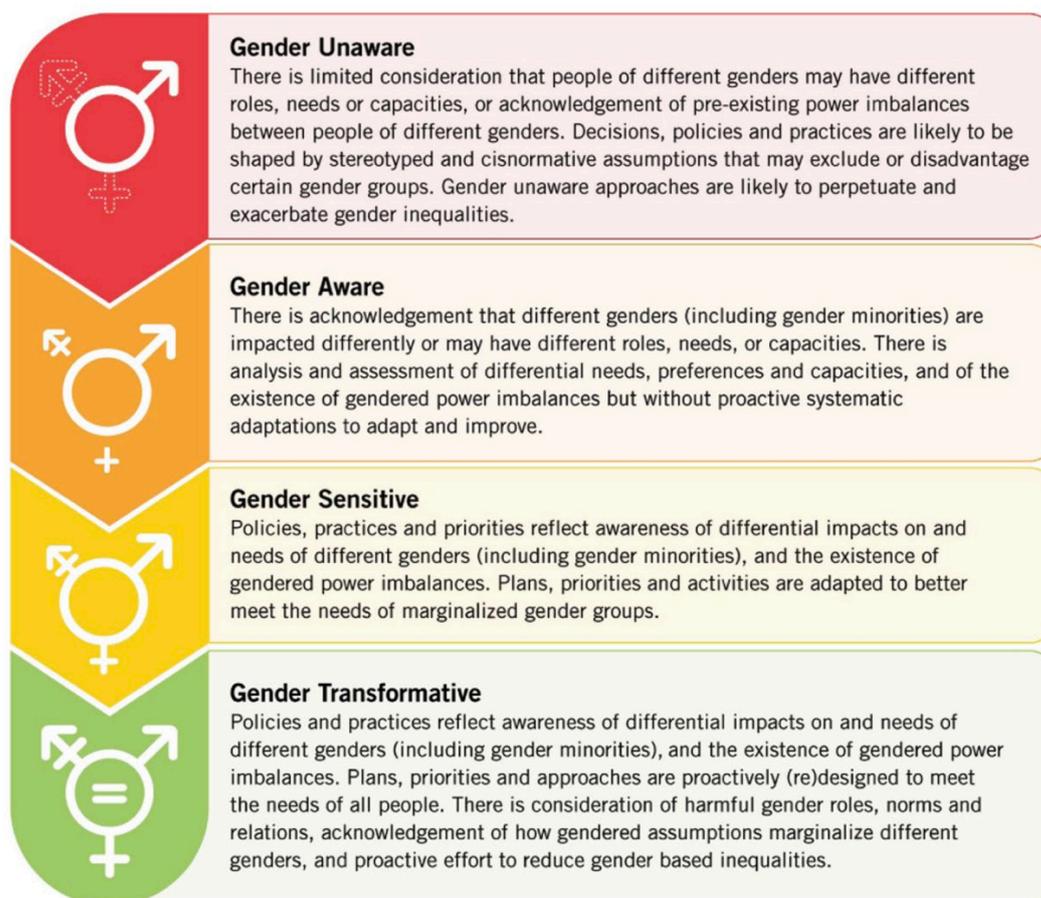


Figure 1.2: Gender Aware to Gender Transformative practice.

1.4 Gender-based violence in new sites of vulnerability

As global crises evolve, new sites of vulnerability have emerged where women and girls face increased risks of gender-based violence (GBV). These sites include migration routes, conflict areas, and pandemic-affected communities. Structural inequalities and shifting social dynamics contribute to heightened risks in these settings. For example, refugee and migrant women often travel through irregular and dangerous routes, exposing them to trafficking, sexual violence, and forced labour. Many rely on smugglers or border officials, who sometimes coerce them into sex or sex work in exchange for safe passage.³⁴ For example, in Libya, nearly 80 per cent of migrant women interviewed in detention centres reported experiencing sexual violence³⁵ and according to a report by the Wilson Centre in Washington D.C., a

³⁴ UNHCR (2024). *UNHCR warns of devastating spike in risk of gender-based violence for women and girls forced to flee*. UNHCR 29 Nov 2024 <https://www.unhcr.org/news/briefing-notes/unhcr-warns-devastating-spike-risk-gender-based-violence-women-and-girls-forced>

³⁵ IOM (2022). *IOM Libyan Migrant Report Round 40*. IOM Dec 2021-Jan 2022. https://dtm.iom.int/sites/g/files/tmzbd1461/files/reports/DTM_Libya_R40_Migrant_Report_FINAL.pdf

significant number of women and girls in Central America experience further victimisation in their migration journey, on top of the personal security concerns they already faced in their home communities.³⁶ Women and girls in conflict zones face systematic sexual violence, forced marriages, and exploitation by armed groups and sexual violence is used as a weapon of war to intimidate communities and break social structures.³⁷ During health crises like the COVID-19, lockdowns trapped women at home with abusers, while access to support services declined and healthcare systems prioritised pandemic responses, leading to reduced availability of sexual and reproductive health services.³⁸ For example, domestic violence helpline calls increased by 25-50 per cent worldwide during COVID-19 lockdowns.³⁹

Thus, new sites of vulnerability expose women and girls to evolving forms of GBV, exacerbated by new vulnerabilities created with rising migration crises, armed conflict, and global health emergencies. Addressing these issues requires integrated policies, gender-responsive humanitarian aid, and legal protections to prevent and respond to GBV in these spaces. Of special interest in this report and given the traction that climate security and digital security issues have gained in ASEAN, the discussion below focuses on these two specific areas of vulnerability for women, as well as on women's health and complex emergencies.

1.4.1 Climate security

Women bear the brunt of climate change impacts. They are more likely to be affected by extreme weather events, food and water scarcity, displacement, and health risks.⁴⁰ These heightened vulnerabilities stem from social inequality, limited access to education, and fewer economic opportunities compared to men. Such inequalities exacerbate vulnerabilities, as women often have limited access to resources, education, healthcare, and decision-making power.⁴¹ Recognising these disparities is crucial for understanding the urgency of addressing women's needs in climate change adaptation and mitigation strategies. In Southeast Asia, some key climate change effects specifically point to potential threats to regional peace and order, where women's safety and security can become more challenged. This includes but is not limited to forced displacement, food insecurity, water and sanitation issues and potential

³⁶ Gonnella-Platts, Natalie; Jenny Villatoro, and Laura Collins. *No Justice: Gender-based Violence and Migration in Central America*. Gender-based Violence Insight: Central America. (p11) Wilson Center (undated) [online] https://gwbccenter.imgix.net/Publications/Reports/gwbi_Immigration,_Security,_and_Gender-Based_Violence.pdf

³⁷ ICRC (2014). *Violence against women*. ICRC, 2025 [online] <https://www.icrc.org/en/document/violence-against-women>

³⁸ WHO (2021). Responding to Violence against Women and Children During COVID-19: Impact on service provision, strategies and actions in the WHO European Region. WHO <https://iris.who.int/bitstream/handle/10665/349504/9789289056403-eng.pdf>

³⁹ UN Women (2021). *The Shadow Pandemic: Violence against women during COVID-19*. UNWomen <https://www.unwomen.org/en/news/in-focus/in-focus-gender-equality-in-covid-19-response/violence-against-women-during-covid-19#:~:text=Since%20the%20outbreak%20of%20COVID,collective%20effort%20to%20stop%20it.>

⁴⁰ UNWomen Watch. *Fact Sheet: Women, Gender Equality and Climate Change*. UN Women, 2009 https://www.un.org/womenwatch/feature/climate_change/

⁴¹ Ibid.

health risks – all of which can result in different manifestations of violence against women or can be a result of structural violence against women.

Climate change-induced disasters, such as flooding as a result of high intensity tropical storms very often result in forced displacement. Although all affected populations are moved from their homes and suffer from such displacement, women - particularly those in rural areas - are more likely to be affected due to their limited access to resources, education, and economic opportunities, particularly if this displacement is for an extended period. Sometimes such migratory concerns because of environmental factors even lead to increased death rates for women in certain parts of the world as a ‘direct link to their socio-economic status, behavioural restrictions and poor access to information’.⁴² Their lack of education and/or prevailing social norms sometimes prevent them from actively participating in meetings or discussions with local leaders or officials, around resource distribution or rebuilding efforts for their communities. This in turn prevents their needs being represented. These can include anything from the rebuilding of communities to reinstating some forms of economic security, post-disaster. Instead of these disasters being opportunities to build back better, such exclusion retains women in their vulnerable states.

Women play a crucial role in agricultural production and food security in Southeast Asia and the world over. However, climate change impacts, such as changing rainfall patterns and increased pest and disease outbreaks, which affect crops, pose significant challenges to their livelihoods and food security. For one, limited consultation with female food producers removes them from important decision-making ‘spaces’, which disempowers them in face of critical food insecurity.

These are just some of the impacts of climate change on women’s lives. Each of these, on its own, can be further dissected. For example, the intersectional impacts of climate change on urban women, or women of ethnic minority groups or indigenous women will be different. These differences must be taken into consideration when planning for a just climate future.

1.4.2 Digital security

In a somewhat similar vein, gender inequality and gender-based violence in the digital world, as in the physical world, are indicators of more widespread social fractures and disruption. Yet we do not see much action in addressing this policy blind spot when we look at the regional cybersecurity architecture and governance of the virtual space. Much like in the physical

⁴² Ibid.

realm, the idea of women's equality in general, and their safety and well-being in particular, has been under-politicised in this new arena. Despite the fact that we very much live digital lives today, there really is little movement in addressing this gap in policy discussions. Much of this has to do with the limited data on women's presence in, and usage of, the digital space. Digital technologies have only served to intensify the tensions between national security and the security of individuals, and the policies or laws set in place to ensure such security in the digital ecosystem. The orientation of digital data — its indifference to people and places⁴³ — sheds light on the fragility of legal knowledge, which becomes "increasingly 'undone' by digital technologies and future-oriented security practices".⁴⁴ To address these rapid changes, policymakers have opted to explore these areas through systems of governance that, once again, leave out groups of interest, be it women, sexual minorities or other minority groups.

The emergence of social media has revolutionised the way individuals engage with information and express their opinions. This shift has particularly significant implications for discussions of security, traditionally dominated by elite narratives. In his work on expressions of vernacular security via social media in France, Joseph Downing explores how social media platforms have empowered everyday people ('vernacular security speak,') to challenge established discourses and shape public understanding of security issues.⁴⁵ This can be both for good and nefarious reasons. The impacts of this 'empowering' is felt very differently by men and women. In security contexts, social media platforms can be used to subvert official discourses and promote alternative narratives about threats and responses. These dynamics can undermine women's contributions to economic development and nation-building and can fuel forms of 'masculine indignance' that resist women's participation in the public sphere. An example is the online backlash directed at women who comment on or participate in national politics. Moreover, the expansion of digital platforms has led to new forms of GBV, including cyberstalking, doxing, deepfake pornography, and online harassment. Women journalists, activists, and politicians are particularly targeted, discouraging them from participating in public discourse.⁴⁶ A 2021 study by Amnesty International found that 85 per cent of women who spend time online have witnessed online violence. 38 per cent of women have been the target of online violence.⁴⁷

⁴³ Claudia Aradau, "Assembling (Non)Knowledge: Security, Law, and Surveillance in a Digital World"

⁴⁴ Claudia Aradau, "Assembling (Non)Knowledge: Security, Law, and Surveillance in a Digital World": p329

⁴⁵ Downing, Joseph. "Memeing and Speaking Vernacular Security on Social Media: YouTube and Twitter Resistance to an ISIS Islamist Terror Threat to Marseille, France". *Journal of Global Security Studies*, vol 6, iss. 2 (June 2021): ogz081

⁴⁶ Posetti, Julie; Nabeelah Shabbir; Diana Maynard; Kalina Bontcheva and Nermine Aboulez, (2021) *The Chilling: global trends in online violence against women journalists; research discussion paper*. UNESCO 2021[online] <https://unesdoc.unesco.org/ark:/48223/pf0000377223>

⁴⁷ Amnesty International (2024). *Online Violence*. Amnesty International [online] <https://www.amnesty.org/en/what-we-do/technology/online-violence/>

1.4.3 Health security

Women's health security entails the protection of women's physical, mental, and reproductive health from diseases, violence, and restricted access to care. It encompasses health education, reduction in maternal mortality and morbidity, as well as freedom from gender-based violence.⁴⁸ A gendered approach to health security highlights how gender can determine who gets exposed to diseases and who shapes health-related policies, who performs frontline response, and who suffers the long-term consequences.⁴⁹

Women's health security is threatened by pervasive violence and barriers to sexual and reproductive health services such as STI/HIV testing, maternal care and post-rape care, and safe abortion services.⁵⁰ Stigma attached to sex-education and family planning combined with the lack of social support and awareness, adversely affects timely access to medical attention. Economic insecurity and the burden of unpaid caregiving also significantly erode women's ability to safeguard their own physical and mental health. Studies show that mental health issues like anxiety, depression, and Post Traumatic Stress Disorder, or PTSD, disproportionately affect women, especially female healthcare professionals, who are often underpaid and exploited.⁵¹

Institutionalised violence like racism, sexism, conflict, forced migration, and other forms of discrimination further exacerbate insecurity for women. These risks intensify during crises like natural disasters, pandemics, and armed conflicts, when preexisting socio-economic inequalities deepen. Women's health security, therefore, *intersects with identity and structural factors*. The risks posed are hence multilayered and differentiated.⁵²

Reconsidering Women's Health Security in the Wake of COVID-19

The COVID-19 pandemic amplified gendered inequalities and risks to women's health security worldwide. Its impacts on women range from economic insecurity to subsequent social fallout, such as increased sexual violence.⁵³ There is little consensus on definition of 'health security'

⁴⁸ World Health Organization (1996). Geneva <https://press.un.org/en/1996/19960426.h2905.html>

⁴⁹ Sophie Harman, "Threat Not Solution: Gender, Global Health Security and COVID-19," *International Affairs*, March 23, 2021, iiab012, <https://doi.org/10.1093/ia/iab012>.

⁵⁰ Janet Fleischman, *Time to Address the Intersecting Crises of Covid-19, HIV, and Gender Inequality*, November 30, 2020, <https://www.csis.org/analysis/time-address-intersecting-crises-covid-19-hiv-and-gender-inequality>.

⁵¹ Florence Thibaut and Gihan El Nahas, "Women's Mental Health and Lessons Learnt from the COVID-19 Pandemic," *The Psychiatric Clinics of North America*, ahead of print, April 18, 2023, <https://doi.org/10.1016/j.psc.2023.04.001>.

⁵² Christian Henrik Alexander Kuran et al., "Vulnerability and Vulnerable Groups from an Intersectionality Perspective," *International Journal of Disaster Risk Reduction* 50 (November 2020): 101826, <https://doi.org/10.1016/j.ijdr.2020.101826>.

⁵³ United Nations Women (2020). *From Insights to Action: Gender Equality in the Wake of COVID-19*. United Nations. <https://doi.org/10.18356/f837e09b-en>.

due to the interdisciplinarity of the term, where ‘health’ and ‘security’ fall under the purview of various disciplines including Medicine, International Security, and Development Studies.⁵⁴ Even among various UN agencies, there are differences in the understanding and application of the concept.⁵⁵ Nevertheless, the widespread usage of the term by diverse players affirms its significance. For women, a broad definition of health security stressing “health education, reduction in maternal mortality and morbidity, and women’s freedom from violence”, as adopted by the Global Commission on Women’s Health, proves useful.⁵⁶

A direct impact of COVID-19 on women’s health security is through the loss of livelihood and lack of social protection. Around 47 million women and girls have been pushed into extreme poverty since the declaration of the pandemic.⁵⁷ Studies have also shown correlations between women’s poor mental health and (i) low income,⁵⁸ (ii) intimate partner violence,⁵⁹ (iii) armed conflict,⁶⁰ (iv) climate change,⁶¹ and (v) forced migration.⁶² Furthermore, the burden of caregiving also falls disproportionately on women either informally (within family as wives and mothers) or formally (as nurses, teachers, counsellors). These roles are often attached to occupational hazards, are uncompensated or undercompensated financially, or are overlooked as labour critical to the economy.⁶³

In sum, women’s health security has been exposed to increased vulnerabilities, both during a crisis or in the aftermath, which has not only deepened pre-existing gender inequalities but also created new ones.

1.4.4 Complex emergencies

The UN High Commissioner for Refugees has described a complex emergency as a “humanitarian crisis in a country, region or society where there is a total or considerable

⁵⁴ Sadiya Mariam Malik et al., “Reconceptualising Health Security in Post-COVID-19 World,” *BMJ Global Health* 6, no. 7 (2021): e006520, <https://doi.org/10.1136/bmjgh-2021-006520>.

⁵⁵ William Aldis, “Health Security as a Public Health Concept: A Critical Analysis,” *Health Policy and Planning* 23, no. 6 (2008): 369–75, <https://doi.org/10.1093/heapol/czn030>.

⁵⁶ World Health Organization (1996). Geneva <https://press.un.org/en/1996/19960426.h2905.html>

⁵⁷ Oxfam International, “5 Ways Women and Girls Have Been the Hardest Hit by Covid-19.” <https://www.oxfam.org/en/5-ways-women-and-girls-have-been-hardest-hit-covid-19>.

⁵⁸ Rachel M. Thomson et al., “How Do Income Changes Impact on Mental Health and Wellbeing for Working-Age Adults? A Systematic Review and Meta-Analysis,” *The Lancet Public Health* 7, no. 6 (2022): e515–28, [https://doi.org/10.1016/S2468-2667\(22\)00058-5](https://doi.org/10.1016/S2468-2667(22)00058-5).

⁵⁹ Nicole Moulding et al., “Rethinking Women’s Mental Health After Intimate Partner Violence,” *Violence Against Women* 27, no. 8 (2021): 1064–90, <https://doi.org/10.1177/1077801220921937>.

⁶⁰ Eran Bendavid et al., “The Effects of Armed Conflict on the Health of Women and Children,” *The Lancet* 397, no. 10273 (2021): 522–32, [https://doi.org/10.1016/S0140-6736\(21\)00131-8](https://doi.org/10.1016/S0140-6736(21)00131-8).

⁶¹ Gulnaz Anjum and Mudassar Aziz, “Climate Change and Gendered Vulnerability: A Systematic Review of Women’s Health,” *Women’s Health* 21 (September 2025): 17455057251323645, <https://doi.org/10.1177/17455057251323645>.

⁶² Susan Rees and Jane Fisher, “Forced Migration, Trauma, and the Risk of Mental Health Disorders among Women in the Perinatal Period,” *The Lancet Public Health* 8, no. 3 (2023): e166–67, [https://doi.org/10.1016/S2468-2667\(23\)00009-9](https://doi.org/10.1016/S2468-2667(23)00009-9).

⁶³ Jane Elizabeth Sanders et al., “The Cost of Caregiving: The Disproportionate and Invisible Impact of COVID-19 on Women,” *Affilia* 40, no. 3 (2025): 471–89, <https://doi.org/10.1177/08861099251317493>.

breakdown of authority resulting from internal or external conflict, and which requires an international response that goes beyond the mandate or capacity of any single agency and/or the ongoing UN country programme.”⁶⁴ Complex emergencies are characterised by large-scale human suffering and high security risks for relief workers⁶⁵ as a result of interrelated and compounding environmental, socioeconomic, and political crises.⁶⁶ The COVID-19 pandemic spreading, for instance, in refugee camps or regions prone to natural disasters, has exacerbated existing inequalities of gender, disability, race, ethnicity, class, and so on.

For women, complex emergencies bring an additional layer of gendered vulnerabilities. In today’s context of multiple active conflicts including in Ukraine and Gaza, women are exposed to sexual, physical, and psychological abuses. Armed groups may use gender-based violence (GBV) as a tactic to destabilise communities.⁶⁷ Many cases of GBV and domestic abuse go unreported in conflict zones since access to healthcare and justice are severely curtailed.⁶⁸ Moreover, the collapse of healthcare during complex emergencies restricts access to menstrual, maternal, abortive, and contraceptive care. Women’s mental health is also negatively impacted due to crises such as armed conflict,⁶⁹ climate change,⁷⁰ and forced migration.⁷¹ Stigma faced by individuals with serious mental illnesses— particularly women— compounds safety risks under emergencies.⁷² Additionally, unpaid and underpaid caregiving work is shouldered disproportionately by women, who then face barriers in affording the cost of living during complex emergencies.⁷³

Economic insecurity coupled with climate change further increases the risk of food insecurity. Shifts in agricultural patterns, loss of livelihood, and displacement due to extreme weather

⁶⁴ UNHCR (2025). “Coordination in Complex Emergencies,” UNHCR, <https://www.unhcr.org/publications/coordination-complex-emergencies>.

⁶⁵ Ibid.

⁶⁶ A. Kruczkiewicz et al., “Compound Risks and Complex Emergencies Require New Approaches to Preparedness,” *Proceedings of the National Academy of Sciences* 118, no. 19 (2021): e2106795118, world, <https://doi.org/10.1073/pnas.2106795118>.

⁶⁷ Nata Duvvury et al., “Feminist Perspectives on Conflict, Disaster, and Violence against Women: Introduction to the Special Issue,” *Feminist Economics* 30, no. 4 (2024): 1–15, <https://doi.org/10.1080/13545701.2024.2413364>.

⁶⁸ UNHCR (2025). “UNHCR Warns of Devastating Spike in Risk of Gender-Based Violence for Women and Girls Forced to Flee,” UNHCR, <https://www.unhcr.org/news/briefing-notes/unhcr-warns-devastating-spike-risk-gender-based-violence-women-and-girls-forced>.

⁶⁹ Eran Bendavid et al., “The Effects of Armed Conflict on the Health of Women and Children,” *The Lancet* 397, no. 10273 (2021): 522–32, [https://doi.org/10.1016/S0140-6736\(21\)00131-8](https://doi.org/10.1016/S0140-6736(21)00131-8).

⁷⁰ Gulnaz Anjum and Mudassar Aziz, “Climate Change and Gendered Vulnerability: A Systematic Review of Women’s Health,” *Women’s Health* 21 (September 2025): 17455057251323645, <https://doi.org/10.1177/17455057251323645>.

⁷¹ Susan Rees and Jane Fisher, “Forced Migration, Trauma, and the Risk of Mental Health Disorders among Women in the Perinatal Period,” *The Lancet Public Health* 8, no. 3 (2023): e166–67, [https://doi.org/10.1016/S2468-2667\(23\)00009-9](https://doi.org/10.1016/S2468-2667(23)00009-9).

⁷² Aanchal Modani et al., “‘Because I Am a Female’: Stigma and Safety Perspectives from Racially/Ethnically Diverse Women with Serious Mental Illnesses,” *Community Mental Health Journal* 61, no. 3 (2025): 420–31, <https://doi.org/10.1007/s10597-024-01346-8>.

⁷³ Yeonsoo S. Lee et al., “Women’s Health in Times of Emergency: We Must Take Action,” *Journal of Women’s Health* 30, no. 3 (2021): 289–92, <https://doi.org/10.1089/jwh.2020.8600>.

often force women to assume new roles as providers and decisionmakers.⁷⁴ Moreover, GBV can often be a manifestation of the frustrations caused by food insecurity.⁷⁵ Natural disasters, both related and unrelated to climate, put women at a disadvantage because of gaps in access to information on disaster preparedness, access to public shelters and aid, and limits to mobility.⁷⁶ Furthermore, in overcrowded shelters and camps, women and girls are vulnerable to sexual abuse and rape. Unsanitary conditions often have health implications for women, especially if cultural norms allow female hygiene only under conditions of privacy and separation from men.⁷⁷

Emergencies, either natural or man-made, also disrupt girls' education. Family resources, limited by loss of income, post-crisis, are often directed to sons' education over that of daughters. Older daughters are expected to care for siblings, partake in household chores, and as a result, stay home from school.⁷⁸

To reiterate, vulnerability is highly contextual and differential— it depends on the intersection of identities based on geographic location, income, education, health, age, social class, race, and ethnicity.⁷⁹ Different axes of inequality combined with humanitarian crises impact different groups of women in varying ways.

1.4.5 Crisis situations and secondary risks

Across Southeast Asia, women's precarity is shaped by compounding pressures along migration routes, in conflict-affected areas, and amid intensifying climate shocks. Women and girls continue to constitute the majority of identified trafficking victims globally, and in ASEAN they face overlapping risks of sexual exploitation, forced labour (including in cyber-scams compounds), domestic servitude, and forced marriage.⁸⁰ This is not accidental: gendered labour segmentation, unpaid care burdens, and unequal access to citizenship and

⁷⁴ Gracious Maviza Synnestvedt Joyce Takaindisa, Mandlenkosi Maphosa, and Thea, "Gender and Food Security: How Displacement Can Disrupt Traditional Roles in Agriculture-Dependent Communities," Migrationpolicy.Org, September 12, 2025, <https://www.migrationpolicy.org/article/displacement-gender-food-security>.

⁷⁵ Agrawal, Pooja *et al.*, "The Interrelationship between Food Security, Climate Change, and Gender-Based Violence: A Scoping Review with System Dynamics Modelling," *PLoS Global Public Health* 3, no. 2 (2023): e0000300, <https://doi.org/10.1371/journal.pgph.0000300>.

⁷⁶ Hilary Matfess, "Gender Inequality Makes Natural Disasters Deadlier for Women," *World Politics Review*, April 10, 2025, <https://www.worldpoliticsreview.com/gender-inequality-women-natural-disasters/>.

⁷⁷ Eric Neumayer and Thomas Plümper, "The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981–2002," *Annals of the Association of American Geographers* 97, no. 3 (2007): 551–66, <https://doi.org/10.1111/j.1467-8306.2007.00563.x>.

⁷⁸ Kirk, Jackie *Education in Emergencies: The Gender Implications - Advocacy Brief*. UNESCO Bangkok, (2006). <https://unesdoc.unesco.org/ark:/48223/pf0000148908>

⁷⁹ Christian Henrik Alexander Kuran *et al.*, "Vulnerability and Vulnerable Groups from an Intersectionality Perspective," *International Journal of Disaster Risk Reduction* 50 (November 2020): 101826, <https://doi.org/10.1016/j.ijdr.2020.101826>.

⁸⁰ IOM (2022) World Migration Report. Chapter 6: Gender and Migration: Trends, Gaps and Urgent Action. <https://worldmigrationreport.iom.int/what-we-do/world-migration-report-2024-chapter-6/beyond-numbers-gender-dimensions-throughout-migration-cycle>

documentation make women more likely to accept risky migration or informal work, and more likely to be targeted by intermediaries posing as recruiters. Climate hazards magnify these vulnerabilities by disrupting livelihoods, uprooting families, and straining basic services, conditions traffickers exploit because women's income-generation options narrow fastest in crises. Disasters such as major floods, typhoons, and prolonged droughts in Viet Nam, the Philippines, Myanmar, and parts of Thailand have increased rural impoverishment and temporary displacement. Following disasters, households often resort to short-term migration, taking up informal work in construction, domestic service, agriculture, or entertainment in urban centres and coastal economic zones. Where early-warning systems do not include gendered protection measures such as safe transport, information in minority languages, or child-care options, women end up moving irregularly, without documentation, and through brokers they do not know.

Conflict dynamics often drive large-scale displacement. This has been the case in some states, heightening exposure to trafficking for women and girls who traverse informal crossings. These routes are poorly monitored, involve multiple intermediaries, and frequently intersect with criminal networks that also trade in drugs, weapons, and wildlife. Within these networks, women can be diverted away from their stated migration destination and moved instead into forced marriages in other places, entertainment venues in border towns, domestic work under conditions of confinement, and more recently, according to INTERPOL data, industrialised cyber-scam centres that extract profit through technology-enabled fraud.⁸¹

Technology has also enhanced these nefarious practices. Digital infrastructures help create new 'sites' of exploitation. Online recruitment, short videos, and messaging apps allow traffickers to mask the true nature of jobs and to reach women in rural areas who previously would have been out of their radius. Once on site, data indicates that women can be controlled through a combination of debt, surveillance, language barriers, and the threat of criminalisation if they try to escape.

In both conflict and climate emergencies, the absence of gender-responsive early-warning and referral systems enables traffickers to target women precisely when household resources and social protection are weakest.

⁸¹ Ngui, Yantoultra (2024) Southeast Asia Human Trafficking now a Global Crisis, Interpol Says. Reuters, March 28 2024. <https://www.reuters.com/world/asia-pacific/southeast-asia-human-trafficking-now-global-crisis-interpol-says-2024-03-27/>

1.5 Potential of the WPS RPA - engaging EWS in new sites of vulnerability

The idea of an inclusive and gender-sensitive environment is clearly stated in the ASEAN Community Vision 2025, further marked out in the Political-Security Community vision where it states that ASEAN hopes to realise an “inclusive and responsive community that ensures our peoples enjoy human rights and fundamental freedoms as well as thrive in a just, democratic, harmonious, and gender-sensitive environment in accordance with the principles of democracy, good governance, and the rule of law.”⁸² A regional study on WPS in 2021 examined the possible interpretations of WPS across ASEAN’s community pillars: the ASEAN Socio-Cultural Community (ASCC), The ASEAN Political-Security Community (APSC) and the ASEAN Economic Community (AEC) and all three have engaged to advance WPS in the region.⁸³ Operationalising this vision necessitates the collection of data that can assist in monitoring and addressing current challenges, as well as preventing new ones to regional peace, security, and stability. This opens up the possibility of gender-sensitive early warning action to serve as (i) a means of data collection, (ii) a monitoring mechanism and, (iii) a means of injecting empirical research into policy-making processes.

The idea of early warning action appears in several places in the WPS RPA, particularly under the prevention matrix, specifically outputs 3.1 and 4.1 (measurable results) and their respective priority actions (initiatives to carry out). Here is where early warning action is specifically mentioned, for example, a Strategic Outcome indicator on what to measure explicitly states that one area of focus should be the:

*Number of AMS with gender-responsive early warning mechanisms, including the regular collection and analysis of data on conflict and violence and the monitoring and tracking of conflict and other peace and security indicators, including data from women, men, youth and marginalised groups, to support early intervention and risk mitigation.*⁸⁴

Although EWS does not appear explicitly in the protection matrix that outlines the protection of women and girls from all forms of sexual and gender-based violence in conflict, post-conflict, peacebuilding, and humanitarian settings,⁸⁵ the potential for early warning action, especially in Output 1.1 under this matrix (increase capacity to develop and implement legislation,

⁸² ASEAN (2015). *ASEAN 2025: Forging Ahead Together*. Jakarta, Indonesia: ASEAN Secretariat: 2015. <https://www.asean.org/wp-content/uploads/2015/12/ASEAN-2025-Forging-Ahead-Together-final.pdf>

⁸³ ASEAN (2015) *ASEAN 2025: Forging Ahead Together*: p14.

⁸⁴ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p29.

⁸⁵ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p21.

policies and measures to prevent and eliminate SGBV⁸⁶ in conflict, emergency, and disaster settings), is rather evident. Moreover, the ASEAN Regional Framework on Protection, Gender, and Inclusion in Disaster Management 2021-2025, also reiterates bridging the gap between “disaster management plans, gender equality plans, and plans for the prevention on GBV”.⁸⁷

The disproportionate suffering of women in natural disaster settings is mentioned in several places in the WPS RPA, which highlights the importance of the increasing threat to peace, security, and stability that the impacts of climate change will bring to the region. The potential increase in GBV in the aftermath of natural hazards and the call for greater integration of gender-sensitive disaster management policies (especially in the prevention and protection of women) further stresses the usefulness and importance of early warning action. Although the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) Work Plan 2021-2025 mentions EWS in natural disasters, it does not necessarily advocate for gender-based early warning action. Therefore, the WPS RPA, which also ties into the AADMER Work Plan, provides possible inroads for gender-based EWS to address SGBV in natural disaster settings.

There is increasing recognition in the region of the issue of online violence against women, and the barriers women face in freely participating in the democratising space of the digital ecosystem. The ongoing ASEAN-IPR regional study on the role of cybersecurity and information technology in fostering a culture of peace in ASEAN, has a focus on the intersection of gender, human rights, and cybersecurity. The study zooms in on areas such as the prevalence of online harassment and violence against women, women’s role in (and the potential susceptibility) to online radicalisation, and the need for creating safe digital spaces for women.⁸⁸ The WPS RPA does mention mainstreaming gender and engaging women in countering violent extremism and preventing cybersecurity threats.⁸⁹ Gender-responsive early warning mechanism is mentioned, including the collection and analyses of data on conflict and violence and the monitoring and tracking of conflicts and other peace and security indicators.⁹⁰ This includes strategies to address cybersecurity issues, which presents another entry point for the use of GEWS in the WPS RPA.

⁸⁶ Ref note 17. I have retained the original form as is mentioned in the document: ‘Sexual and Gender-based Violence’ or SGBV, instead of just GBV/VAW, found elsewhere in this report. Where SGBV appears, it refers to corresponding document usage.

⁸⁷ ASEAN (2021). *ASEAN Regional Framework on Protection, Gender and Inclusion in Disaster Management 2021-2025*. Jakarta, Indonesia: ASEAN Secretariat, 2021: p1.

⁸⁸ See also, Nair, Tamara and Teo Yi-Ling. “Creating Women’s ‘Safe Space’ in Digital Life: Perspectives from Singapore.” *NTS Insight*, No IN23-02. Singapore: RSIS Centre for Non-Traditional Security Studies, Nanyang Technological University, Singapore: 2023, for a study on women’s ‘Safe spaces’ in Singapore.

⁸⁹ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p29.

⁹⁰ *Ibid.*

Women's health issues are inseparable from human security. Ensuring women's health security requires rights-based legal protections, gender-responsive health systems, crisis preparedness, and digital safeguards. Women's health extends beyond clinical health to include issues of safety and resilience in the face of violence, inequality, and crises. Strengthening these areas not only protects women but also contributes to resilient, inclusive societies. Unfortunately, women were still underrepresented in the region's response strategies: across 11 COVID-19 task forces in eight member states (with data), women represented only 25 percent or less of participants.⁹¹ Three out of 11 had no women's representation.⁹²

Women's health is mentioned in a few places in the RPA, especially in response to the pandemic. The RPA document acknowledges the crucial role women played in the region's fight against COVID-19, forming the majority of frontline workers, healthcare professionals, social workers, community volunteers, caregivers in the homes, teachers in schools etc. For example, under the protection matrix, priority action 1.2.2. addresses the need to support women with care work demands during "times of displacement, conflicts, insecurity, disasters public health and economic crises,"⁹³ reflecting actions prescribed in the RPA on eliminating violence against women.⁹⁴ Priority action 1.2.3 is more specific:

*Mainstreaming gender issues into the provision of healthcare services (including sexual and reproductive health), including in emergency and humanitarian settings. Build capacity of frontline responders to understand and provide culturally sensitive and appropriate healthcare services to minority women, youth, elderly, women with disabilities, etc., during times of conflict, insecurity and violence.*⁹⁵

The issue of complex emergencies, which the WPS RPA does not explicitly mention, is a serious threat to the well-being of women and girls in the region. This would include conflict-areas hit by natural hazards, or the shutdown of digital access in times of crisis. The possible occurrence of these scenarios is greater in the current environment of climate change and (international) cybersecurity threats. The heightened potential of GBV under these emergencies necessitates strong warning indicators, protection policies, and good monitoring

⁹¹ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p11.

⁹² Ibid.

⁹³ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p23.

⁹⁴ ASEAN (2016) *ASEAN Regional Plan of Action on Elimination of Violence Against Women*. ASEAN Secretariat. Jakarta, Indonesia:p10 <https://cil.nus.edu.sg/wp-content/uploads/2019/02/2016-2025-RPA-on-Elimination-of-Violence-against-Women-1.pdf>

⁹⁵ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p23.

systems. Under such scenarios, gender-based EWS can offer the vital data needed to set these in place.

The significance of the use of early warning action in the ASEAN WPS RPA in preventing gender-based violence in the region is not without precedent but only go so far as to describe EWS and its implication in the region.⁹⁶ On a broader scale, the commitment to gendered EWS would also be significant examining the political purpose of the RPA and hence, the political support these systems might / will garner across the region. In fact, a gender-based EWS, possible within the priority actions of the WPS RPA, makes the regional plan an efficient tool for data gathering and monitoring trends on GBV. In addition, it also allows for more informed policymaking when it comes to the welfare and well-being of women in the region, the differentiated experience and challenges for women are reflected in trying to address both traditional and non-traditional security challenges. It would be beneficial to examine how focusing on early warning action might be an opportunity to operationalise the WPS RPA and stimulate greater interest in gender-based EWS in member states, given the traction the WPS agenda is gaining in the region.

Incorporating different tools such as GEWS help stimulate interest and action into the WPS RPA. This would help broaden the agenda to include different ways of ensuring women's participation in decision-making, their protection against structural, as well as physical violence, and prevention from future threats to their well-being. What can be agreed upon is that early warning systems must:⁹⁷

- be based at the grassroots level
- have strong field-based monitors
- use multiple sources of information, both quantitative and qualitative
- capitalise on communication and informational technology, including digital tools
- provide regular reports and updates to key national stakeholders with strong links to response mechanisms, for accountability

What is important is that attempts at developing GEWS within the WPS RPA, must at all stages (planning and design, implementation, and monitoring and evaluating), be cognisant of the fact that meaningful participation and inclusion of women, attention to issues of gender inequality and the elusiveness and sensitivity, including cultural sensitivity, of data collection,

⁹⁶ ASEAN (2022). *Early Warning Capabilities: Effective Conflict Prevention webinar*. [online] Institute for Peace and Reconciliation (ASEAN-IPR), 27 April 2022. <https://www.youtube.com/watch?v=fMxT465sYE4>

⁹⁷ Diaz, Pablo Castillo and Sunita Caminha (2012). *Gender-Responsive Early Warning: Overview and How-to Guide*. UN Women. October 2012. <https://www.un.org/shestandsforpeace/sites/www.un.org/shestandsforpeace/files/wpssourcebook-04e-genderresponsiveearlywarning-en.pdf>

is not a given and must be considered at every stage. A lack of understanding and commitment by non-experts in gender dynamics, weak political will, and socio-economic as well as cultural barriers to women's participation continue to be the few, but critical, factors that can derail well-meaning attempts.

1.6 Summary of chapters

This chapter presents the conceptual framework and discusses the usefulness of GEWS in the WPS RPA examining how such indicators can signal state effectiveness, from a gendered perspective. New areas of gendered inequalities are also discussed while stressing the role of the WPS RPA, and how the regional plan might operate in these new spaces. The chapter's aim is to set the stage for subsequent discussions in each of these new spaces where GBV and VAW can manifest and how GEWS might help identify, monitor and address these challenges.

Chapter 2 discusses natural disasters in ASEAN explaining how women and girls are disproportionately affected during crisis situations due to pre-existing social, cultural, and economic inequalities. During crises like Typhoon Haiyan, women faced heightened risks of violence and maternal health challenges, men and women also had unequal access to information, and much of the caregiving responsibilities, which traditionally falls on women, delayed their evacuation. Gendered EWS address these vulnerabilities by tailoring communication, evacuation, and shelter planning to women's needs. Case studies from Vanuatu, Nepal, and the Philippines show how women-led networks and inclusive flood monitoring improve survival, safety, and access to maternal care. Embedding such gender-responsive EWS in the WPS RPA advances commitments to prevention and protection.

The next chapter considers how technology-facilitated violence against women disrupts economic and social development and promotes a culture of violence which is the antithesis to ASEAN vision of a people-centred community of peace and stability. Chapter 3 focuses on how digital spaces increasingly influence security, identity, and civic participation and it becomes essential to examine how such tools can both empower and endanger, especially in light of rising online victimisation and gender-based violence in the digital ecosystem. The chapter discusses entry points for GEWS in the RPA to strengthen women's freedom of expression in politics, peacebuilding, and public debate (participation), and channelling accountability to actors that should be responsible such as governments, platform creators and users.

Chapter 4 highlights how the COVID-19 pandemic has stressed the critical need for gendered EWS in health crisis situations in ASEAN. Health emergencies, such as pandemics, disease outbreaks, natural disasters, and malnutrition, disproportionately affect women and girls. This in turn exacerbates maternal mortality, reproductive health disruptions, domestic violence, and food insecurity. Many women are also in the frontline, as healthcare workers or caregivers to children and elderly at home, making their participation essential in crisis preparedness. Current ASEAN systems, while strong in disease surveillance and emergency response, largely overlook gender-specific vulnerabilities. They fail to collect disaggregated data or integrate women's roles in crisis management. Case studies such as the COVID-19 pandemic, Zika and Malaria outbreaks in Southeast Asia, Typhoon Haiyan, and malnutrition at a regional level illustrate how crises uniquely threaten women's health, from heightened exposure to disease and maternal complications to disrupted access to healthcare and nutrition. The chapter highlights that without gender integration, EWS fail to address these risks, leaving women under-served and invisible. Embedding gender perspectives in health EWS is essential for equitable and effective crisis response and for supporting ASEAN's broader peace and security agenda.

To conclude, chapter 5 provides key recommendations on incorporating GEWS in the ASEAN WPS RPA. It also addresses how GEWS can help in better planning for complex emergencies and how the WPS RPA needs to interact with both traditional and non-traditional security frameworks in ASEAN.

1.7 A brief annotation on writing

As mentioned in notes 17 and 84 in this chapter, we have used the terms Gender-based Violence (GBV) or Violence against Women (VAW) in this report to incorporate wider systemic violence against women as well as physical violence, which includes sexual violence, perpetrated against women and girls. Where 'Sexual and Gender-based Violence' (SGBV) appears in consulted literature, we have retained the form found in these documents.

The term 'natural disasters' is used in this report to depict natural hazards such as earthquakes, tsunamis, floods and droughts. The authors do not necessarily agree with this usage because classifying disasters as 'natural' hides human responsibility and the fact that human vulnerability is often politically produced. Referring to natural hazards as natural disasters masks the political and economic choices that make some communities far more vulnerable than others, and it reduces accountability on the part of governments and other

high-level actors.⁹⁸ However, there is a tendency to use ‘natural disasters’ in ASEAN parlance and in several regional documents. Therefore, to avoid confusion and in keeping with the regional lexicon, the authors have adopted the term ‘natural disasters’ instead of ‘natural hazards’ to depict natural phenomena that lead to large-scale human crisis.

The sections spotlighting trafficking in persons (this chapter, section 1.4.5 and in chapter 5, section 5.3) is a result of discussions during the reviewers’ workshop (see Annexe I). This particular issue, especially the trafficking of women, is a secondary result of almost all the primary crisis situations discussed in this report. The authors have not devoted a chapter examining GEWS in human trafficking as it is a broad and complex issue encompassing legal and security mechanisms in the region, which is worthy of a report all on its own. We have however briefly mentioned it in this report and discussed how the use of GEWS can help with prevention of trafficking of women and their protection in times of crises. We identify the issue as a key priority for future research in GEWS.

A supplementary point should also be made on the recommendations in this report. Our recommendations are to address the importance of GEWS more generally to develop better early warning systems, since they are currently not comprehensive, currently. While there are many areas in the RPA where EWS is mentioned, we want to stress the importance of GEWS, which can take into consideration the real-life experiences of women and girls in various crisis settings. Enhanced (gendered) early warning systems in each of the emerging human security issues mentioned in following chapters will magnify the importance of gender-disaggregated data collection and monitoring, to increase the effectiveness of its usage in the WPS RPA. We are, of course, not suggesting that these recommendations be inserted into the RPA itself. What we discuss in this report are priority areas for better data collection with the explicit participation of women to: prevent atrocities against them from occurring, to protect them from any and all atrocities, to include their participation in strategies of mitigating violence against women and maintain their sustained and inclusive participation in crisis management and recovery.

Bearing this in mind, our recommendations touch on important areas for consideration in GEWS that can intersect with the RPA. If ASEAN or Member States are to incorporate early warning systems effectively, these recommendations should be considered.

⁹⁸ Lim, Junli (2025). “Climate disasters aren’t natural – and calling them that makes things worse” 18 September 2025. Lowy Institute. <https://www.lowyinstitute.org/the-interpreter/climate-disasters-aren-t-natural-calling-them-makes-things-worse>

1.8 A note on research ethics

Research conducted for this project is mostly desk-based and consists of consulting secondary published material, which includes reports from government agencies, international organisations, independent entities, NGOs and private companies. The authors have also consulted academic as well as non-academic publications. We have endeavoured to cite all referenced work accurately and have given due credit to the creators of all materials consulted for this report. If it is found that we misquoted sources or have used the data without due credit, we hope this will be brought to our attention so that we may immediately rectify the situation, with our apologies.

Information and reviews of the report were also solicited from regional experts during a closed-door workshop we convened – *Early Warning Systems in the ASEAN Women, Peace and Security Regional Plan of Action: Potential (and Pitfalls) in preventing GBV* – at the S. Rajaratnam School of International Studies, Nanyang Technological University on 8 October 2025, and was done so under the Chatham House Rule and therefore, non-attributable. Details of this workshop can be found in Annexe I. We are grateful for the information our experts have shared and the reviews they have provided on this work. We believe our report has been much improved from their feedback and valuable comments.

1.9 Acknowledgments

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2. Gendered EWS and the Protection of Women and Girls in Natural Disasters

“Gender” refers to the socio-cultural roles, norms and values associated with being a man or a woman. These roles, norms, and values determine how women and men prepare for, react to, and recover from disasters, and they often cause unequal distribution of power, economic opportunities, and sense of agency.

~ Global Facility for Disaster Reduction and Recovery~⁹⁹

In the ASEAN region, natural disasters are a major cause of crises, and evidence shows that women and girls are often disproportionately affected. During the 2013 Typhoon Haiyan in the Philippines, for example, many women and girls faced or risked gender-based violence in evacuation centres, while pregnant and lactating women struggled to access maternal healthcare in the immediate aftermath.¹⁰⁰ These vulnerabilities are rooted in pre-existing social, economic, and political inequalities in societies, which are often amplified during disasters.¹⁰¹ Gendered EWS can improve these outcomes by ensuring timely evacuation, access to maternal care, and safer shelters, directly reducing mortality and the risk of GBV during disasters. Therefore, a gender-responsive EWS is both preventative and protective, making it an effective tool to reduce women’s disproportionate risks during natural disasters.

A gendered EWS integrates gender considerations into risk preparedness, response, and contingency planning, tailoring approaches to address the specific needs, concerns, and capacities of marginalised gender groups in the event of a crisis. By doing so, it helps redesign existing emergency response practices, which often work in siloes, and ensures the needs of all people are better met during crisis situations.¹⁰² The ASEAN WPS RPA emphasises gender mainstreaming in peace and security, including humanitarian and emergency response. Integrating gender-responsive EWS into the ASEAN WPS RPA is therefore vital, as it directly advances commitments to its pillars, particularly on Protection and Prevention:

⁹⁹ Global Facility for Disaster Reduction and Recovery (GFDRR). (2015). *Gender Equality in Disaster Recovery*. Washington, DC: World Bank, <https://www.gfdr.org/sites/default/files/publication/gender-equality-disaster-recovery.PDF>.

¹⁰⁰ UNFPA. (2013). *More support still needed for health and protection of women and girls 100 days after Typhoon Haiyan*. [online] UNFPA, <https://www.unfpa.org/press/more-support-still-needed-health-protection-women-and-girls-100-days-after-typhoon-haiyan>.

¹⁰¹ UN Women, n.d. *Gender dimensions of disaster risk reduction*. [online] UN Women, <https://wrd.unwomen.org/practice/topics/gender-dimensions#:~:text=Gender%2C%20age%2C%20disability%2C%20race,19%20crisis%20has%20clearly%20demonstrated>.

¹⁰² Sustaining Peace Select, n.d. *Gender-responsive early warning system coupled with early response*. [online] Sustaining Peace Select, <https://www.sustainingpeace-select.org/tool/gender-responsive-early-warning-system-coupled-with-early-response/#:~:text=A%20gender%2Dresponse%20early%20warning,the%20needs%20of%20all%20people>.

- Prevention, to “enhance training and capacity-building of peace and security institutions such as judicial system, judges, police, military and other first responders in early warning signs and interventions that can and should be made to prevent SGBV, both during peacetime and in times of conflict and emergency response”; and
- Protection, to “promote the protection and safeguarding of women’s and girls’ rights, and women’s economic empowerment, in conflict-affected contexts as well as during times of emergency, humanitarian response and insecurity.”¹⁰³

These commitments demonstrate that a gendered EWS is not just a technical tool but a core mechanism for advancing the ASEAN WPS agenda, and in safeguarding women and girls in disaster contexts. Hence, examining the specific vulnerabilities women and girls face during disasters provides crucial insight into how gendered EWS can be designed and implemented to maximise both protection and effectiveness.

2.1 Gendered vulnerabilities in disaster contexts

The roles and responsibilities of men and women vary within communities. In many communities, women bear all or most of the household and caregiving responsibilities. These domestic roles impede women’s ability to respond to disaster warnings in a timely manner and to protect themselves effectively.¹⁰⁴ A research study conducted after Hurricane Katrina in New Orleans found that women made up about 80 percent of those left behind in the city to fend for themselves during and after the disaster.¹⁰⁵ The women were not well-prepared to evacuate when alerted about the impending disaster and did not get help from their partners. Children were solely dependent on their mothers for support, and this delayed the evacuation process significantly for women.¹⁰⁶

Men and women also have unequal access to information. Various factors such as literacy rates, access to technology and cultural norms create barriers for women in receiving early warnings. For example, men may be more inclined to receive information through formal channels such as the news or official announcements, while women rely more on word-of-

¹⁰³ ASEAN. (2022). *ASEAN Regional Plan of Action on Women, Peace and Security (2022–2026)*. Jakarta: Association of Southeast Asian Nations.

¹⁰⁴ UN Women. (2021). *Policy and practice recommendations for gender-transformative flood early warning systems*. UN Women, <https://wrd.unwomen.org/sites/default/files/2021-11/2021109-aasctf-policy-brief-policy-and-practice-recommendations-gender-transformative-flood-early.pdf>.

¹⁰⁵ Elaine Enarson, “Gender and Natural Disasters,” *International Journal of Mass Emergencies and Disasters* 18, no. 1 (2000): 1–13. <https://www.jstor.org/stable/20838463>.

¹⁰⁶ William E. Thornton and Lisa Voigt, “Disaster Rape: Vulnerability of Women to Sexual Assaults during Hurricane Katrina,” *Journal of Public Management & Social Policy* 13, no. 2 (2007): Special Edition “Voices of Katrina.”

mouth or local female networks.¹⁰⁷ UN Women highlights that these vulnerabilities are further shaped by age, disability, and socioeconomic status, meaning women with intersecting marginalised identities may be at even greater risk of delayed information and inadequate support.¹⁰⁸ Information that is received is also interpreted and responded to differently by men and women. In the event of a disaster, this hinders women's ability to receive information quickly.¹⁰⁹ By addressing these communication gaps, gendered EWS enable women to respond faster and more effectively, improving survival rates and reducing the risk of harm during emergencies.

Violence against women and girls is a global problem, in post-disaster settings.¹¹⁰ Women and girls face risks to domestic and sexual violence during and in the immediate aftermath of a disaster.¹¹¹ Financial instability, disaster-trauma mental health issues, increased substance abuse amongst men are some factors that lead to domestic violence. Overcrowded evacuation centres or other housing situations limit the privacy of women and girls and heightens their risks to harassment, sexual violence and even human trafficking. In war-torn areas, sexual violence is also seen as a means to control a group of the population.¹¹² After the 2004 Tsunami, semi-structured interviews were conducted in Sri Lanka and these documented incidents of beatings and murders of women by their spouses as a result of substance abuse.¹¹³ Gender-transformative EWS can help mitigate these risks by linking women to safe evacuation spaces, pre-planning protection measures, and ensuring that early warning and response systems account for GBV prevention.¹¹⁴ These measures have been shown to decrease exposure to harassment, sexual violence, and neglect, while supporting women's health and overall well-being during disaster response.

Addressing these intersecting vulnerabilities through gendered EWS is therefore critical not only for reducing mortality and health risks, but also for protecting women and girls from violence, neglect, and other disaster-related harms. Integrating these approaches into the

¹⁰⁷ Data-Pop Alliance. (2021). *Women and ICT access: Bridging the digital divide for disaster resilience*. [online] Data-Pop Alliance, <https://datapopalliance.org/women-and-ict-access-bridging-the-digital-divide-for-disaster-resilience/>.

¹⁰⁸ UN Women, n.d. *Gender dimensions of disaster risk reduction*. [online] UN Women, <https://wrd.unwomen.org/practice/topics/gender-dimensions#:~:text=Gender%2C%20age%2C%20disability%2C%20race,19%20crisis%20has%20clearly%20demonstrated.>

¹⁰⁹ Data-Pop Alliance. (2021). *Women and ICT access: Bridging the digital divide for disaster resilience*. [online] Data-Pop Alliance, <https://datapopalliance.org/women-and-ict-access-bridging-the-digital-divide-for-disaster-resilience/>.

¹¹⁰ Center for Disaster Philanthropy (2020). *Women and girls in disasters*. [online] Center for Disaster Philanthropy, <https://disasterphilanthropy.org/cdp-resource/women-and-girls-in-disasters/>.

¹¹¹ National Sexual Violence Resource Center (NSVRC) (2021). *Sexual violence in disasters*. [online] NSVRC, https://www.nsvrc.org/sites/default/files/2021-11/sexual_violence_in_disasters_final508_0.pdf.

¹¹² Center for Disaster Philanthropy (2020). *Women and girls in disasters*. [online] Center for Disaster Philanthropy, <https://disasterphilanthropy.org/cdp-resource/women-and-girls-in-disasters/>.

¹¹³ Sue Fisher, "Violence against Women and Natural Disasters: Findings from Post-Tsunami Sri Lanka," *Violence Against Women* 16, no. 8 (2010): 902–918. <https://doi.org/10.1177/1077801210377649>.

¹¹⁴ UN Women (2021). *Policy and practice recommendations for gender-transformative flood early warning systems*. UN Women, <https://wrd.unwomen.org/sites/default/files/2021-11/202109-aasctf-policy-brief-policy-and-practice-recommendations-gender-transformative-flood-early.pdf>.

ASEAN WPS RPA ensures that emergency response and early warning mechanisms achieve regional commitments to protect and prevent any form of violence against women and girls.

2.2 Gendered EWS as a preventive and protective tool

EWS that have integrated gender into its plan could help prevent deaths and illnesses among women that are exacerbated during crisis situations.

Firstly, gender-responsive EWS increase women's chances of survival by ensuring that they receive notifications and information that they can act upon prior to a disaster (prevention). In many contexts, women's evacuation during disasters is often delayed as a result of their domestic roles and unequal access to communication tools to seek help or voice their concerns. Early evacuation can significantly reduce the fatality rates amongst women in crisis situations and reduce their suffering while being stranded in their households.¹¹⁵ A report by UN Women in 2021 highlighted that more women were able to get to safety quicker when flood warnings were issued factoring women's mobility constraints. This demonstrates that gendered EWS are preventative in nature, directly reducing loss of life.¹¹⁶

While timely evacuation addresses immediate survival, gendered EWS also plays a critical role in protecting women and girls from violence and health risks during and after disasters (protection). Early warnings allow them to occupy safer, more inclusive evacuation spaces. Disasters often force women and girls into overcrowded evacuation centres that lack healthcare for pregnant and lactating women, privacy, lighting, sanitary items needed for menstruating females, or a gender-sensitive design. This could heighten their risk of gender-based violence. The International Federation of the Red Cross (IFRC) emphasises that embedding protection into EWS and shelter preparedness can dramatically reduce women's exposure to violence during disasters.¹¹⁷ When an EWS integrates gender from the beginning, pre-designated women-friendly shelters and private spaces for women can be allocated. Moreover, steps can be taken to help reduce and protect women who might face any form of violence from men.¹¹⁸

¹¹⁵ UNDP (2012). *Gender and Disaster Risk Reduction: Policy Brief 3*. United Nations Development Programme, <https://www.undp.org/sites/g/files/zskgke326/files/publications/PB3-AP-Gender-and-disaster-risk-reduction.pdf>.

¹¹⁶ UN Women (2021). *Policy and Practice Recommendations for Gender-Transformative Flood Early Warning Systems*. UN Women, <https://wrds.unwomen.org/sites/default/files/2021-11/202109-aasctf-policy-brief-policy-and-practice-recommendations-gender-transformative-flood-early.pdf>.

¹¹⁷ IFRC (2015). *Gender, Disaster Risk Reduction and Early Warning Systems*, <https://www.ifrc.org/media/48958>.

¹¹⁸ CARE (2016). *Gender Equality and Climate Change: A Guide for Policy and Practice*, <https://careclimatechange.org/wp-content/uploads/2016/08/Gender-Equality.pdf>.

A gendered EWS that has incorporated specific information about the health of women and girls in the affected communities helps anticipate and protect their specific maternal and reproductive health needs post-disaster (protection).¹¹⁹ Collecting and analysing sex-and age-disaggregated data in EWS allows first responders to identify pregnant and lactating women and pre-position maternal kits for them and to map out access to health facilities helping to reduce the risks of maternal mortality and complications. A gender-responsive EWS moves beyond addressing basic survival needs to protect long-term health and dignity of women and girls.¹²⁰ Nonetheless, it is important to note that data gaps remain a persistent challenge. It has been noted that gendered flood EWS data have at times been inconsistent or delayed, leaving vulnerable women unaccounted for and unable to access timely support.¹²¹ Without accurate, granular data, even well-intentioned gendered EWS risk reinforcing existing inequalities rather than mitigating them.

Hence, gender-responsive EWS can both prevent GBV and protect women and girls during disasters, reducing the disproportionate impact on them. Gendered EWS acknowledges that women and men may experience disasters differently, and therefore, steps need to be taken to meet the needs of women and girls to protect them and reduce the disparity of disaster impacts between the genders. Integrating these mechanisms into the ASEAN WPS RPA ensures that regional commitments for prevention and protection are operationalised through disaster preparedness and response systems.

2.3 Case studies and regional lessons

The following sections below provide examples of how GEWS has been executed three regions: the Philippines, Nepal and the Pacific Islands. These cases were chosen for two main reasons: they are wider pan-Asian regional examples, and they have good, documented reports and data that are available for the assessment of the effectiveness of GEWS in natural disaster management. Their experience with early warning systems help increase preparedness and resilience of women, and by extension that of their communities, against the onslaught of natural hazards. GEWS has improved disaster response operations in Nepal and the Pacific Islands and strengthened women's capacity and agency. The Philippines case

¹¹⁹ UN Women, n.d. Sex, Age, and Disability Disaggregated Data (SADDD), [https://wrd.unwomen.org/practice/topics/data#:~:text=Sex%2C%20age%2C%20and%20disability%20disaggregated%20data%20\(SA DDD\),and%20unpack%20the%20differentiated%20impacts%20of%20disasters](https://wrd.unwomen.org/practice/topics/data#:~:text=Sex%2C%20age%2C%20and%20disability%20disaggregated%20data%20(SA%20DDD),and%20unpack%20the%20differentiated%20impacts%20of%20disasters).

¹²⁰ International Committee of the Red Cross (ICRC), n.d. Sex, Age and Disability Data Disaggregation Framework, <https://shop.icrc.org/sex-age-and-disability-data-disaggregation-framework-pdf-en.html>.

¹²¹ UN Women (2025). Empowering equality: Strengthening gender data systems in Europe and Central Asia, <https://eca.unwomen.org/en/stories/news/2025/03/empowering-equality-strengthening-gender-data-systems-in-europe-and-central-asia>; Natalia Marczak, Ma. Lourdes Veneracion, and Ana Carla Presto (2024) *Gender Indicators*. R2P Asia Pacific. <https://r2pasiapacific.org/files/12154/Gender%20Indicators%20May%202024%20FINAL.pdf>.

study illuminates areas where there is a need for greater gender-sensitive considerations. In light of climate change and increased frequency and duration of meteorological hazards such as tropical storms, flood and droughts, GEWS could mean increasing the chances of survival and reducing loss of lives during such natural disasters.

2.3.1 Women-led early warning networks in the Pacific Islands

As mentioned, a crucial step to ensure a gender-sensitive response and recovery for women and girls during disasters is collecting, analysing and disseminating gender-disaggregated data regularly. The collection of gender-differentiated data provides key information on the complexities of the different and interdependent roles of the people in the affected communities, and a means to develop a more comprehensive and efficient disaster response strategy that protects women and girls.¹²² Initiatives to collect data about the population have been implemented in the Pacific region by women. These women-led networks demonstrate how gender-responsive EWS can both prevent harm and protect women and girls during disasters.

Vanuatu is one of the most vulnerable nations to climate change. The International Organization for Migration (IOM)'s Displacement Tracking Matrix (DTM), which gathers and analyses data on the mobility, vulnerabilities and needs of displaced and mobile population, has been implementing data collection exercises in various countries including Vanuatu, to support the development of gendered assistance in pre- and post-disaster interventions.¹²³ Such data, if disaggregated, can even serve as proxy indicators of the likelihood of increased GBV under such circumstances.

In 2020, during Cyclone Harold, DTM Vanuatu collected sex- and age-disaggregated data from key informants and conducted in-depth interviews with households that had experienced some form of trauma or displacement due to environmental disasters. The findings revealed that there was an increase in prevalence of child marriages post-disaster, in 46 locations, due to cultural practices, or for exchange of land, money and the desire to retain family lineage. DTM called attention to the fact that these findings showcase the importance of collecting gender-disaggregated data as gender plays a role in the different basic needs in response and recovery periods of a disaster. Information on the distinct experiences and vulnerabilities

¹²² Hong Tran (2021). *Gender-disaggregated Data Crucial in Ensuring Gender-Sensitive Response and Recovery for Displaced Women and Girls in Disaster Contexts*. IOM. <https://weblog.iom.int/gender-disaggregated-data-crucial-ensuring-gender-sensitive-response-and-recovery-displaced-women-and-girls-disaster-contexts>.

¹²³ IOM (2020). *DTM Vanuatu — Tropical Cyclone Harold Displacement Report – June 2020*. IOM, Vanuatu.

of women and girls and their other intersecting characteristics is important. In the disaster context, the outcomes for women and men are influenced by their intersectional identities in society.¹²⁴

With the support of ActionAid International, a network called Women I Tok Tok Tugeta (WITTT) was also established in 2015 for Vanuatu's women and girls.¹²⁵ The network was built to create a safe space for ni-Vanuatu¹²⁶ women and girls, including those with disabilities, to identify their safety and security concerns and to find short and long-term solutions to overcome these challenges. It provided an opportunity for the women and girls to share knowledge and practices amongst themselves to address their financial insecurity and domestic and sexual violence.¹²⁷

As part of the network, a platform called the Women Wetem Weta (WWW) was then created as a communication system for a multi-hazard early-warning system among women and girls.¹²⁸ Thousands of women in Vanuatu have connected through this platform to share disaster preparedness information and warnings and coordinate the distribution of humanitarian aid. In March 2023, when Cyclones Judy and Kevin hit Vanuatu, consecutively, 80 percent of the infrastructure was damaged, causing water and power shortages across the island. However, on islands like Malo, where ActionAid has implemented WWW, women disseminated disaster preparedness information with each other using their mobile phones, quickly surveyed the damaged infrastructure themselves and accounted for the residents in their villages, including traditionally neglected women-led or disabled person-led households. These proactive measures prevented harm by enabling timely evacuation and protection of the most vulnerable, particularly women and girls. Their quick response allowed them to provide fresh food to more than 30,000 people in the Vanuatuan islands.¹²⁹

The efficiency to provide for the community, particularly those who are most vulnerable in their communities prompted the government to allow the WWW to formally join the National Emergency Operations Centre led by the National Disaster Management Office (NDMO).¹³⁰

¹²⁴ Hong Tran (2021). *Gender-disaggregated Data Crucial in Ensuring Gender-Sensitive Response and Recovery for Displaced Women and Girls in Disaster Contexts*. IOM. <https://weblog.iom.int/gender-disaggregated-data-crucial-ensuring-gender-sensitive-response-and-recovery-displaced-women-and-girls-disaster-contexts>.

¹²⁵ ActionAid Australia (2020). *Women I Tok Tok Tugeta (WITTT) Network Concept Note*, <https://actionaid.org.au/wp-content/uploads/2020/09/ActionAid-Australia-WITTT-Network-Concept-Note.pdf>.

¹²⁶ The term 'ni-Vanuatu' means 'of' or 'from' Vanuatu, referring to the Melanesian people of Vanuatu, composed of multi ethno-linguistic traditions.

¹²⁷ International Organization for Migration (IOM). (2023). *Ni-Vanuatu women leading inclusive disaster risk reduction and response*, <https://www.preventionweb.net/drr-community-voices/ni-vanuatu-women-leading-inclusive-disaster-risk-reduction-and-response>.

¹²⁸ UN Women (2022). *Inclusive and accessible multi-hazard early-warning systems*, <https://wrd.unwomen.org/sites/default/files/2022-03/Inclusive%20And%20Accessible%20Multi-hazard%20Early-warning%20Systems.pdf>.

¹²⁹ Samantha Cameron (2023). *How a 9,000 Strong Women's Network Responds to Climate Change in Vanuatu*. Women's Agenda. <https://womensagenda.com.au/latest/soapbox/how-a-9000-strong-womens-network-responds-to-climate-change-in-vanuatu/>.

¹³⁰ UN Women (2022). *Vanuatu Baseline: Gender and Disaster Risk Reduction*, <https://wrd.unwomen.org/sites/default/files/2022-09/Final%20UNWomen%20Vanuatu%20Baseline%20%281%29.pdf>.

The NDMO now relies on the network to review the accuracy and consistency of the early warning messages that are sent out to communities and to ensure that the most vulnerable people are informed about crisis situations. This integration into national emergency systems demonstrates how gender-responsive EWS can align with broader regional frameworks, such as the ASEAN WPS RPA, to prevent and protect women and girls during disasters. The women in the network are also able to directly voice out to the government about their priorities and needs during a crisis situation to enhance their safety and to protect themselves.¹³¹ This inclusion of women is an essential part of crisis management especially during the relief and recovery stages (another key pillar in the WPS framework) to ensure vulnerability is reduced in the event of another natural hazard striking the islands.

However, it is important to note that the overreliance on mobile phones and network-based platforms also created accessibility barriers. Women in isolated islands without network coverage were excluded, highlighting how technology-driven EWS can inadvertently privilege certain groups while leaving others more vulnerable.¹³² This demonstrates the need for complementary communication channels, including women-led community networks and word-of-mouth alerts, to ensure inclusive protection for all women. GEWS in digital and technological spaces will be discussed in the next chapter. Suffice to say that women's digital/mobile phone accessibility should not be taken as a given.

In the Fiji Islands, the Women's Weather Watch was launched in 2004 after catastrophic floods in Vanua Levu, Fiji's second largest island. femLinkpacific, a feminist media and broadcasting organisation in Fiji,¹³³ interviewed women and girls who had experienced the weather event to collate data about what had happened and what their personal experiences were.¹³⁴

After the data was collected and analysed, Women's Weather Watch was created as a model for monitoring oncoming disasters and how the crisis was managed in their respective communities, particularly towards women and girls. The platform also provided the opportunity for women to optimise information-sharing each time a disaster occurred by sharing real-time

¹³¹ Pacific Community (SPC) (2023). "We will flourish like no other": Spearheading women-led disaster risk reduction in Vanuatu, <https://www.spc.int/updates/blog/blog/2023/08/we-will-flourish-like-no-other-flora-spearheading-women-led-disaster#:~:text=She%20has%20also%20been%20instrumental%20in%20establishing,It%20now%20reaches%20half%20of%20Vanuatu's%20population>.

¹³² Andrea Bittner, Laura Sharland, and ActionAid Australia (2019) *Power, Participation and Potential: Women's Leadership in Preventing Violent Extremism in Vanuatu*. ActionAid Australia. <https://actionaid.org.au/wp-content/uploads/2019/11/Monash-GRACC-Report-Vanuatu.pdf>; UN Women (2024). *Gender-Responsive and Disability-Inclusive Early Warning and Early Action in the Pacific Region*, https://wrd.unwomen.org/sites/default/files/2024-08/gender-responsive-and-disability-inclusive-early-warning-and-early-action-in-the-pacific-region_0%20%282%29.pdf.

¹³³ FemLINK Pacific, n.d. FemLINKPacific, <https://iwda.org.au/femlinkpacific/>.

¹³⁴ FemLINK Pacific, n.d. Programs, <https://www.femlinkpacific.org.fj/programs>.

information with other local women.¹³⁵ This exchange helped prevent harm and improve protective measures by refining response operations prior to, during, and after disasters. At the heart of the Women's Weather Watch system is a women-led community radio, linking a network of women leaders and correspondents to real-time information so that they can help keep each other safe and secure.¹³⁶

These Pacific Islands examples highlight how proactive, women-led early warning networks can serve as both preventative and protective tools. They also aid in incorporating the pillars of participation and women's role in relief and recovery. Lessons learned here could certainly be adapted to ASEAN contexts to strengthen gender-responsive EWS, ensuring that women and girls receive timely warnings, occupy safe spaces, and are actively involved in disaster planning and response.

2.3.2 Women's participation in flood monitoring and evacuation planning in Nepal

Nepal provides another concrete example of how gender-responsive EWS can save lives and enhance protection for women and girls in disaster contexts. As one of the world's most disaster-prone countries, Nepal faces frequent floods, landslides, and earthquakes, and these disproportionately affect women due to caregiving responsibilities, lack of mobility, and exclusion from information channels.¹³⁷

Recognising these vulnerabilities, the Government of Nepal, with support from organisations such as UN Women and the International Centre for Integrated Mountain Development (ICIMOD), has included women into local disaster management and early warning committees.¹³⁸ This inclusion ensures that early warnings reach women effectively and are acted upon, reducing harm and serving as a preventative measure.

In flood-prone districts along the Koshi and Karnali rivers, for example, women have been trained to monitor river gauges, use mobile phones to transmit warning data, and disseminate alerts through community radio and door-to-door communication.¹³⁹ Women's groups have

¹³⁵ UN Trust Fund to End Violence against Women (2022). *Fiji: Preventing and ending violence against women and girls in climate change-affected areas*, <https://unfpa.org/en/stories/news/2022/07/fiji-preventing-and-ending-violence-against-women-and-girls-in-climate-change-affected-areas>.

¹³⁶ FemLINK Pacific (2021). Innovation Station: Women's Weather Watch Fiji, <https://actionaid.org.au/articles/innovation-station-womens-weather-watch-fiji/>.

¹³⁷ UN Women and Practical Action (2022). Gender-transformative early warning systems: Experiences from Nepal and Peru, <https://reliefweb.int/report/nepal/gender-transformative-early-warning-systems-experiences-nepal-and-peru>.

¹³⁸ ICIMOD and UN Women (2021). State of Gender Equality and Climate Change in Nepal, <https://www.icimod.org/success-stories/annual-report-2021/state-of-gender-equality-and-climate-change-in-nepal/#:~:text=ICIMOD-UN%20report%20highlights%20areas,building%2C%20coordination%2C%20and%20research>.

¹³⁹ Dinesh Bhandari (2023). *Community-Centred Flood Early Warning System in Nepal*. SOANAS. <https://soanas.org/community-centred-flood-early-warning-system-in-nepal/>.

also been tasked with preparing evacuation plans, including mapping out safe routes that take into account the mobility of pregnant women, the elderly, and those with disabilities.¹⁴⁰ By factoring in these specific needs, gendered EWS enhance protection, ensuring women and girls can evacuate safely while fulfilling caregiving roles.

Importantly, the inclusion of women has also improved protection outcomes. In some communities, women-led committees have co-ordinated with local authorities to pre-identify gender-sensitive shelters with adequate lighting, separate spaces for women and girls, and provisions for maternal and reproductive health. For instance, in Bardiya district, women's disaster preparedness groups worked with health posts to pre-position maternal delivery kits and ensure that lactating mothers had access to nutritional support during flood displacement.¹⁴¹ Evaluations by UN Women show these measures reduced maternal complications and improved the sense of safety for displaced women, demonstrating both preventive and protective functions of gendered EWS.¹⁴²

This Nepal case underscores that integrating women into EWS not only saves lives but also strengthens protection against gender-based violence, neglect, and health risks. The lessons learned, particularly the focus on training, inclusion, and gender-sensitive evacuation planning can inform ASEAN contexts, where similar risks exist, and support regional commitments under the ASEAN WPS RPA to protect women and girls during disasters.

2.3.3 Building gender-responsive early warning systems in Baguio, Philippines

Within the ASEAN region, the Philippines has been more proactive in involving women and girls in developing EWS. Recently, the City of Baguio in the Philippines has been working on developing a flood EWS through the Baguio City Smart Flood Early Warning, Information and Mitigation System Project. The project seeks to use smart technologies to feed information into EWS to mitigate the impact flooding has on communities.¹⁴³

As part of the project, a gender inclusion study was conducted to have a holistic understanding of the relationship between flood risk, gender marginalisation, and gender disparities within

¹⁴⁰ Natalia Marczak, Ma. Lourdes Veneracion, and Ana Carla Presto (2024) *Gender-Transformative Early Warning Systems: Experiences from Nepal and Peru*. ReliefWeb. <https://reliefweb.int/report/nepal/gender-transformative-early-warning-systems-experiences-nepal-and-peru>.

¹⁴¹ UNFPA Nepal (2023). Reproductive Health Kits and Dignity Kits are Important Component of Disaster Preparedness, <https://nepal.unfpa.org/en/news/reproductive-health-kits-and-dignity-kits-are-important-component-disaster-preparedness>.

¹⁴² UN Women (2020). Gender-Responsive Disaster Risk Reduction in Nepal: Promoting Women's Leadership in Early Warning Systems, <https://asiapacific.unwomen.org/en/digital-library/publications/2020/12/gender-responsive-disaster-risk-reduction-in-nepal>.

¹⁴³ Asian Development Bank (ADB) (2023). Empowering Resilience: Baguio's Journey to Gender-Inclusive Flood Early Warning Systems, <https://www.adb.org/news/videos/empowering-resilience-baguio-s-journey-gender-inclusive-flood-early-warning-systems>.

Baguio. The study helped to better understand the specific challenges faced by women and how gender-blind the current system is. It found that women in Baguio often received official flood information late, relying on word-of-mouth, while men received announcements directly from community leaders or media channels. The study also indicated that women were underrepresented in Barangay (local government) disaster councils. This underrepresentation meant that women's communication needs, maternal and reproductive health concerns, and protection requirements in evacuation centres were frequently overlooked in planning and response.¹⁴⁴

The findings from Baguio illustrate the consequences of gender-blind EWS. It caused delays in critical alerts, reduced preparedness among women, and did not meet the protection needs of women and girls during disasters. Conducting post-disaster studies like this is therefore crucial to build more gender-transformative EWS.

Building on the lessons from these diverse contexts, it becomes clear how gendered EWS can advance both preventive and protective objectives in disaster settings, directly supporting the ASEAN WPS RPA's commitments. Taken together, these regional experiences highlight that gendered EWS are most effective when they simultaneously address preventive and protective needs of women and girls. In Vanuatu, timely warnings through the Women Wetem Weta network allowed women to prepare, evacuate, and coordinate community resources, preventing deaths and ensuring that the most vulnerable were accounted for. In Nepal, women-led early warning committees not only facilitated early evacuation but also ensured gender-sensitive shelter arrangements and access to maternal care, directly protecting women and girls from harm. In the Philippines, the Baguio City Gender Inclusion Study underscores how gender-blind systems delay critical alerts and fail to meet women's protection needs. Together, these cases demonstrate that integrating prevention and protection into gender-responsive EWS is essential to reducing the disproportionate risks faced by women and girls during disasters, a key principle that needs to be included in the ASEAN WPS Regional Plan of Action.

2.3.4 Mapping the lessons learnt into the ASEAN WPS RPA

ASEAN's WPS RPA recognises the importance of both prevention and protection of women during crisis situations. However, it has yet to explicitly reference gendered EWS as a tool for

¹⁴⁴ UN Women (2021). Baguio City Gender and Inclusion Study, https://wr.d.unwomen.org/sites/default/files/2022-03/202108-aascf-baguio-city-gender-and-inclusion-study_0.pdf.

operationalising these commitments. The case studies above provide concrete illustrations of how gender-sensitive approaches to disaster preparedness and response advance the aims of the RPA and thus should be included in the plan.

Women-led community networks in the Pacific Islands helped to bring early warnings of impending disasters to households in remote areas, enabling timely evacuation and reducing the number of casualties. This outcome indicator falls under the *Prevention pillar* of the RPA and measures the number of ASEAN Member States with gender-responsive early warning mechanisms. These mechanisms should include the regular collection and analysis of conflict and violence data, as well as the monitoring of peace and security indicators drawn from women, men, youth, and marginalised groups to support early intervention and risk mitigation for women and girls in crisis situations. Although the RPA acknowledges the importance of early warning systems, it makes little reference to building women-only communication networks through which emergency information can be shared. This gap could be addressed under Priority Action 2.2.3, which aims to identify underrepresented groups and ensure effective and inclusive participation channels, tools, and guidelines for civil society, crisis-affected women, GBV survivors, women with disabilities, and women from linguistic or ethnic minorities. Beyond participation frameworks, such communication channels could serve practical protection functions—facilitating women’s evacuation to safe shelters and enabling the timely dissemination of critical information to reduce exposure to illness and violence.

The Nepal case study emphasises the importance of including women as part of the disaster preparedness and response operation. Preparing maternal health kits for pregnant women and planning evacuations taking into consideration the need to protect women from any form of violence, highlights that its gender-sensitive approach to disaster management aligns to the *Protection pillar* of the RPA. One expected output (Output 1.2) is the strengthened capacity of ASEAN and its Member States to protect and safeguard the rights of women and girls, and to advance women’s economic empowerment, in conflict-affected settings as well as during emergencies, humanitarian responses, and periods of insecurity. Training women to monitor, prepare and respond to crisis situations and preparing healthcare kits catered to the specific needs of women, demonstrate how involving women and taking their needs into consideration not only strengthens disaster response but also reduce female fatalities and increases their long-term resilience. This will help ASEAN to protect women and girls.

Finally, the Baguio, Philippines case study, by contrast, reveals the need for ASEAN to go further through the ASEAN WPS RPA to better protect women and girls. The absence of gender-sensitive alerts and shelters left women at heightened risk of injury, exploitation, and unequal access to relief. The RPA already recognises the importance of mainstreaming

gender into healthcare services during emergencies (Priority Action 1.2.3) and highlights the need to train frontliners to provide culturally sensitive and appropriate support to minority women, youth, the elderly, and women with disabilities. Yet, without explicit guidance on how gender considerations can be operationalised within EWS, member states risk reproducing existing inequalities—ultimately undermining the RPA's own goals of prevention and protection.

Together, these examples underscore the need to embed gendered EWS explicitly within the ASEAN WPS RPA, specifically in natural disaster settings. This would bridge the current gap between principle and practice, demonstrating that ASEAN is prepared not only to acknowledge women's vulnerabilities in crises but also to implement solutions that address them. At present, however, as the matrices remain overly general, without clear mechanisms, resources, and accountability frameworks, the commitments risk remaining rhetorical rather than transformative.

2.4 Recommendations

A point to note is that EWS for natural disasters focus more on informing women of impending crisis rather than serving as an indicator for trying to prevent or mitigate the event, which is not going to be possible. However, this points to the need for a coordinated sectoral approach where GEWS in health, digital as well as peace and security mechanisms are integrated into disaster management strategies. Bearing this in mind, this section suggests some recommendation for incorporating EWS in the WPS RPA to build on the lessons learnt from the case studies so as to prevent and protect women and girls from the disproportionate risks they face during natural disasters.

1. Integrate gender from the outset of EWS design

- Ensure women are included in disaster management committees and decision-making roles.
- Conduct Gender Inclusion Studies or community assessments to identify women's specific needs, mobility constraints, and protection concerns as part of disaster management planning.

2. Ensure early warning communication flow channels are accessible to women

- Use multiple channels (mobile networks, women-led community networks, word-of-mouth) to ensure timely alerts reach women and girls.
- Factor in literacy and mobility constraints when designing messages and warnings.

3. Establish gender-sensitive shelters and protection measures

- Pre-position women-friendly shelters with adequate lighting, separate spaces, and access to maternal/reproductive health supplies.
- Include safe spaces and protection protocols for women and girls in evacuation planning to reduce risks of GBV.

4. Collect gender-disaggregated data for an inclusive and informed response

- Track sex, age, health status, household composition etc. to map vulnerabilities and target support to those who need it most.
- Use this data to coordinate emergency and post-disaster operations.

2.5 Conclusion

A gendered EWS is key to reducing inequalities in emergency response operations during natural disasters. A biased EWS will further marginalise vulnerable groups, particularly women and girls, likely leading to higher rates of fatalities and domestic and sexual violence in crisis areas. However, most gender elements integrated into EWS remain limited to local government initiatives or the support of specific organisations. As a result, not all women and girls impacted by disasters have equal access to these inclusive systems.

Incorporating these structures into the ASEAN WPS RPA would increase access, allowing more women and girls to benefit from existing EWS initiatives. It would also enable the sharing of best practices and resources across the ASEAN region, so that information and lessons collated in one area can strengthen protection and preparedness in others. In the long run, regional integration of gendered EWS through ASEAN can create some form of standard preventive and protective measures to be implemented in the event of a disaster, ensuring that women and girls are systematically safeguarded during emergencies.

3. Gendered Early Warning Systems in the Digital Ecosystem

Gender-based violence against women occurs in all spaces and spheres of human interaction, whether public or private... and the redefinition of public and private through technology-mediated environments, such as contemporary forms of violence occurring online and in other digital environments. In all those settings, gender-based violence against women can result from acts or omissions of state or non-state actors, acting territorially or extraterritorially...

~CEDAW General Recommendation 35, para 20~¹⁴⁵

Violence against women is increasingly taking hold in the digital ecosystem and there is a vital need to address this policy blind spot. In the digital age, information technology plays a critical role not only in economic and social development but also in promoting a culture of peace and forms an integral part of peacebuilding – aligned with the ASEAN WPS RPA. As digital spaces increasingly influence security, identity, and civic participation, it becomes essential to examine how such tools can both empower and endanger. This is especially relevant in light of rising online victimisation and gender-based violence in the digital ecosystem.¹⁴⁶

3.1 The digital ecosystem – the perpetuation of online Violence Against Women (VAW)¹⁴⁷

The gendered impacts of digital technology, and its connection with peace and security, are a serious policy weakness. Much like in the physical realm, the idea of women’s equality, in general, and their safety and well-being, in particular, has been under-securitised in this new arena for a number of reasons that will be discussed shortly. Gender inequality and gender-based violence in the digital world, as they are in the physical world, are indicators of more widespread social fractures and disruption. Yet, we do not see much action in addressing this when we look at digital security architecture and the governance of this virtual space. There is little movement in addressing this gap in policy discussions. Much of this has to do with the limited data on women’s presence in, and usage of the digital space. How much do we know

¹⁴⁵ OHCHR (2025). *General Recommendations No 35. (2017) on gender-based violence against women, updating general recommendations No. 19 (1992)*. United Nations. CEDAW/C/GC/35. 26 July 2017: p7. <https://docs.un.org/en/CEDAW/C/GC/35>

¹⁴⁶ Terms like digital ecosystem, cyber- and digital security have distinct meanings, but are sometimes used interchangeably, especially the latter two. Please refer to Table 3.2 for definition of terms, as used in this report.

¹⁴⁷ Parts of this section is adapted from a previous chapter written by the author: Nair, Tamara. “The Women, Peace and Security Agenda in Digital Space”, (pp 19-32) in Gulizar Hacıyakupoglu and Yasmine Wong (eds) *Gender and Security in Digital Space: Navigating Access, Harassment, and Disinformation*. (London, NY: Routledge), 2023.

about women’s usage of this space and the types of obstruction and/or harassment they face in online participation?

Digital technologies have only served to intensify tensions between national security and security of individuals, and policies or laws set in place to ensure such security in the digital ecosystem. As a matter of fact, the orientation of digital data is such – devoid of attention to people and places¹⁴⁸ – that it sheds light on the fragility of legal knowledge, which becomes ‘increasingly “undone” by digital technologies and future-oriented security practices’.¹⁴⁹ To address these rapid changes, policymakers have opted to explore areas of non-knowledge as they emerge in controversies of mass surveillance, fraud, harassment and the like as they would in the physical realm, through systems of governance that, once again, leave out groups of interest, be it women, sexual minorities or other minority groups. What is required is to advance more critical approaches to security, especially for the protection of women and girls, and to engage with different areas of security studies including assessing available international or regional frameworks that can be used to add a level of buoyancy and longevity to digital security policies. While existing legal frameworks form the backbone of policy formulation, new areas of knowledge can act as the ‘skin and bones’ upon which to build what will undoubtedly be an organic construct, growing and expanding, keeping up with the digital ‘Proteus’.

Figure 3.1: Definitions in the Digital Landscape

Digital Ecosystem refers to the entire interconnected environment of people, devices, software, platforms, services, and infrastructure that interact digitally.

It includes:

- Hardware (servers, laptops, smartphones, IoT devices)
- Software (apps, operating systems, platforms)
- Data flows (social media, cloud storage, government databases, business systems)
- Actors (users, companies, states, hackers, regulators)
- Norms and governance (laws, standards, ethical rules)

Cybersecurity’s focus is on protecting systems, networks, servers, and data from digital threats. It mostly deals with external and technical threats like hacking, malware, phishing, denial-of-service attacks. It is also strongly associated with IT infrastructure and organizational resilience.

Digital Security is a broader concept than cybersecurity. Encompasses not just technical protections but also personal, social, and behavioural practices that safeguard people’s digital lives. Includes protecting digital identities, online privacy, safe use of apps and platforms, and awareness of how personal information is shared.

¹⁴⁸ Aradau, Claudia. “Assembling (Non)Knowledge: Security, Law, and Surveillance in a Digital World”. *International Political Sociology*, 11 (2017): pp. 327–342.

¹⁴⁹ Aradau, Claudia. “Assembling (Non)Knowledge: Security, Law, and Surveillance in a Digital World”. *International Political Sociology*, 11 (2017): pp. 329.

There are as many reports, blogs, articles, protests, and even laws against threats or harassment against women online as there are actual incidents of violence faced by women and girls in the digital space. Yet, we do not necessarily see an abatement of these unlawful and dangerous activities despite such justified 'noise' brought up by women's groups or human rights advocates. This is unfortunately evidenced by examples of suicides of prominent female artists as a result of cyberbullying,¹⁵⁰ cases of 'revenge porn'¹⁵¹ being spread online by disgruntled former or current intimate partners to death threats and the hate speech,¹⁵² with a particular feminist twist, directed at women who may be exercising their freedom to express opinions on a social media platform. The online space, then, has become an extension of the physical world where inequality and discrimination have been diffused through the technological boundary. We think of technology as being gender neutral, but it is in fact highly gendered at its very inception. Creators of current digital technologies did not create platforms where all individuals would be safe simply because they come from a world where their safety was never threatened in similar ways.¹⁵³ The social context within which new technologies are created and later embedded is where misogynistic behaviour resides and, therefore, women as well as girls continue to face old threats, now in new places.

Suppression of one's freedom of speech and expression, 'Cyber-Touch',¹⁵⁴ breach of dignity and violation of privacy; all these constitute Violence and Women (VAW). Examples abound of such violence in digital space and there are sadly too many to name here. Suffice to say, activists and researchers, for example, the London School of Economics WPS blog,¹⁵⁵ do a good job in bringing forth many examples of such violence.

¹⁵⁰ Marks, Hayden. "Cyberbullying and the Tragedy of Hana Kimura". *The Diplomat*. 05 June 2020.

<https://thediplomat.com/2020/06/cyberbullying-and-the-tragedy-of-hana-kimura/>; Zuppello, Suzanne. "Why We Let Famous Women Get Bullied Online". *Rolling Stone*. 21 July 2016. <https://www.rollingstone.com/culture/culture-features/why-we-let-famous-women-get-bullied-online-93244/>; Kim, S., Kimber, M., Boyle, M.H., and Georgiades, K. "Sex Differences in the Association Between Cyberbullying Victimization and Mental Health, Substance Use, and Suicidal Ideation in Adolescents". *The Canadian Journal of Psychiatry*, 64, 2(2019): pp. 126–135; among numerous other sources that indicate cyber bullying is prevalent against female celebrities and the females present a significantly higher number of suicide victims because of cyber bullying.

¹⁵¹ Mckinlay, Tahlee, and Tiffany Lavis. "Why Did She Send it in the First Place? Victim Blame in the Context of 'Revenge Porn'." *Psychiatry, Psychology and Law*, 27, 3(2020): pp. 386–396; Dodge, Alexa. "Trading Nudes like Hockey Cards: Exploring the Diversity of 'Revenge Porn' Cases Responded to in Law". *Social & Legal Studies*, 30, 3(2021): pp. 448–468; Bloom, Sarah. "No Vengeance for Revenge Porn Victims: Unravelling Why This Latest Female-Centric, Intimate-Partner Offense Is Still Legal, and Why We Should Criminalize it". *Fordham Urban Law Journal*, 42 (2014): p. 233, among many others.

¹⁵² Edstrom, Maria. "The Trolls Disappear in the Light: Swedish Experiences of Mediated Sexualised Hate Speech in the Aftermath of Behring Breivik". *International Journal for Crime, Justice and Social Democracy*, 5, 2(2016): pp. 96–106; Scott, Jennifer. "Misogyny: Why Is it not a Hate Crime?" BBC News. 15 March 2021. <https://www.bbc.com/news/uk-politics-56399862>; Piscopo, Jennifer. "Being a Woman in Politics Shouldn't Come with Death Threats". *Ms*. 12 February 2020. <https://msmagazine.com/2020/12/02/violence-against-women-being-a-woman-in-politics-shouldnt-come-with-death-threats/>

¹⁵³ Swisher, Kara. (Panellist) Foreign Policy Virtual Dialogue (in collaboration with Our Secure Future): *WPS for the Digital Age: Putting Gender on the Tech Agenda*. 06 May 2021. <https://oursecurefuture.org/news/virtual-dialogue-women-peace-security-digital-age>

¹⁵⁴ This is a term coined by the UN broadband commission for digital development. Refer to: UN Broadband Commission. "Cyber Violence Against Women and Girls' A worldwide Wake-Up Call". *Discussion Paper*, UN Broadband Commission for Digital Development Working Group on Broadband and Gender. UN Broadband Commission, 2015. <https://www.broadbandcommission.org/Documents/reports/bb-wg-gender-discussionpaper2015-executive-summary.pdf>

¹⁵⁵ For more on blogs from the WPS Centre in LSE, please refer to: <https://blogs.lse.ac.uk/wps/?s=WPS+and+digital+security>

In today's evolving digital landscape, digital security must go beyond traditional, state-centric models to embrace a people-centered, gendered approach that prioritises individual safety, particularly for women and girls who face disproportionate risks online. A gender-inclusive digital security framework is not only a matter of digital protection, but also a commitment to human rights, privacy, and equality. Any effort towards national digital security must focus on goals or policies that also address gender equality and must centre inclusive digital spaces as part of its design. Platforms must empower users to block and report abuse and should allow anonymous channels for safer reporting. The design of these tools must prioritise user privacy and safety. As cyber threats grow more complex and multifaceted, the sector urgently needs the perspectives and expertise of underrepresented groups, especially women.

Traditional state-centric approaches to cybersecurity are increasingly insufficient in the face of today's digital realities, particularly for vulnerable groups. These models often fail to recognise the disproportionate risks faced by women and girls online, including cyberstalking, harassment, and hate speech. Existing international instruments, such as the Budapest Convention,¹⁵⁶ focus mainly on technical aspects of cybercrime and do not adequately address gender-specific harms in digital spaces. In the Asia-Pacific region, approximately 88 per cent of women and girls report similar experiences.¹⁵⁷ Globally, 16-58 percent of online aggression and harassment is directed at women.¹⁵⁸ Such high levels of digital violence not only inflict personal trauma but also deter female participation in public and digital life, ultimately undermining peace-building efforts and democratic engagement. More importantly, they stand as indicators of state fragility insofar as it may lead to violence and conflict, bringing the authority and legitimacy of the state into question.

ASEAN stands at a critical juncture in shaping its digital future. When women are safe and empowered in online spaces, they can fully participate in shaping the future of ASEAN both in physical communities and digital domains. Closing the gender gap in digital participation and reducing online VAW are not simply matters of equity but strategic imperatives for peacebuilding and the prevention of conflict.

¹⁵⁶ Council of Europe (2001). *Convention on Cybercrime*. Budapest, 23 November 2001, ETS No. 185. <https://www.europarl.europa.eu/cmsdata/179163/20090225ATT50418EN.pdf#page=2.00>

¹⁵⁷ UN Women (2021). *The Youth Guide To End Online Gender-Based Violence*. UN Women, Asia-Pacific. https://asiapacific.unwomen.org/sites/default/files/2022-12/Youth-Toolkit_14-Dec_compressed-final.pdf

¹⁵⁸ UN Women (2024) *UNGA 79: Intensification of Efforts to Eliminate all Forms of Violence Against Women and Girls: Technology Facilitated Violence Against Women and Girls Report of the UN Secretary General*. <https://www.unwomen.org/sites/default/files/2024-10/a-79-500-sg-report-ending-violence-against-women-and-girls-2024-infographic-and-recommendations-en.pdf>

3.2 How can the wider inclusion of gendered EWS reduce the perpetuation of online violence against women (VAW)?

So, how exactly can gendered EWS in digital space help fight online violence against women? For one, algorithms and human monitors can help to detect and observe early indicators of online violence, such as spikes in misogynistic hashtags or bot-driven harassment campaigns. This helps to flag patterns before they escalate into mass attacks. For example, The International Centre for Journalists or ICFJ together with computer scientists from the University of Sheffield have designed programmes to identify key indicators as well as metrics that signal the escalation of online violence against women journalists.¹⁵⁹ They are also studying the two-way trajectory between online and offline attacks and developing open-source digital tools to detect, monitor and alert responders to high-risk cases. This is vital to highlight the importance of gendered early warning indicators in digital space to prevent offline (actual physical) harm perpetrated on women.

UNESCO also commissioned a global study published in 2020.¹⁶⁰ Some of the findings indicate that:

- 73 percent of women respondents said they had experienced online violence.
- Threats of physical (25 percent) and sexual violence (18 percent) plagued the women journalists surveyed.
- 20 percent of women respondents said they had been attacked or abused offline in connection with online violence they had experienced.
- 13 percent increased their physical security in response to online violence and 4 percent said that they had missed work due to concerns about the attacks jumping offline.
- The mental health impacts of online violence were the most frequently identified (26 percent) consequence. 12 percent of respondents said they had sought medical or psychological help due to the effects of online violence.
- The story theme most often identified in association with increased attacks was gender (47 percent), followed by politics and elections (44 percent), and human rights and social policy (31 percent).

¹⁵⁹ Posetti, Julie and Nabeelah Shabbir (2022) *The Chilling: A global study of online violence against women journalists*. ICFJ with UNESCO. https://www.icfj.org/sites/default/files/2023-02/ICFJ%20Unesco_TheChilling_OnlineViolence.pdf

¹⁶⁰ Posetti, Julie, Nermine Aboulez, Kalina Bontcheva, Jackie Harrison, and Silvio Waisbord (2020)

Online Violence Against Women Journalists: A Global Study of Incidence and Impact. Paris, France: UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000375136/PDF/375136eng.pdf.multi>

The general findings of a later report by UN Women (2022), on tackling online and technology-facilitated violence against women and girls has been extracted and presented below (Figure 3.1).¹⁶¹ A more recent study by UNFPA (2025) states that “a staggering 60 per cent of women experiencing online harm globally, technology-facilitated gender-based violence (TFGBV) is a critical issue requiring urgent attention.”¹⁶²



Figure 3.2: Online and technology-facilitated violence against women and girls (VAWG)

Source: Cerise, et. al. (2022)

¹⁶¹ Cerise, Somali., Ruby Lew, Kalliopi Mingeirou and Yeliz Osman (2022) *Accelerated Efforts to Tackle Online and Technology-facilitated Violence against Women and Girls (VAWG)*. UN Women: p2 https://www.unwomen.org/sites/default/files/2022-10/Accelerating-efforts-to-tackle-online-and-technology-facilitated-violence-against-women-and-girls-en_0.pdf?utm_source=chatgpt.com

¹⁶² UNFPA (2025). *7 things you need to know about online gender-based violence*. UNFPA 11 June 2025. <https://asiapacific.unfpa.org/en/news/7-things-you-need-know-about-online-gender-based-violence>

These should be alarming figures to policy makers as it hinders progress in digital transformation plans in governance and services. Gendered early warning systems can help in providing real-time alerts that can be utilised by civil society actors, human rights defenders and/or law enforcement that will allow for rapid reporting, taking down offending content and stepping in with protective action including the use of legislative instruments. Intergovernmental organisations, states, social media companies, and civil society organisations have an important role to play in developing early warning systems to monitor, predict and prevent online violence escalation.¹⁶³ Collecting data at regular intervals and at ‘peak periods’ of harassment against women, for example, against female candidates during elections, can provide vital data for policymakers to understand when and how women are being targeted and what form such violence takes.

Gendered EWS in the digital space will also help to bridge the gap between online threats and offline consequences. It is important to be able to present empirical evidence of this violence against women to the authorities so that action can be taken against perpetrators, which can also act as a deterrent for future acts of online VAW. At the personal level, providing women with early notification that their personal data has been compromised or if they are being targeted in a smear campaign will allow them to be empowered to act, which could be as easy as changing their privacy setting or taking legal action. This would mean private companies will also need to be part of this partnership and necessary legal instruments should be in place. Gendered EWS in the digital space make it possible to anticipate, avert, *and* alleviate harm, thereby protecting women’s rights, voices, and safety, both online and offline.

In many ASEAN Member States, national systems to address technology-facilitated sexual violence remain under-developed, limiting both prevention and accountability. Evidence-based policymaking is essential for developing effective and inclusive digital governance. Sustained investment in research will provide the empirical foundation needed to shape targeted and responsive digital security strategies. At a recent conference on Cyber-peacebuilding in ASEAN,¹⁶⁴ the following recommendations were put forth by participants from across the region:

- (a) develop ASEAN-wide indicators and monitoring tools to track gender-related progress in cybersecurity and digital inclusion efforts,

¹⁶³ Posetti, Julie and Nabeelah Shabbir (2022). *The Chilling: A global study of online violence against women journalists*.

¹⁶⁴ ASEAN (2025). *ASEAN-IPR Regional Conference on Cybersecurity and the Role of Information Technology in Fostering a Culture of Peace in ASEAN Conference Report*. [forthcoming]

- (b) disseminate findings pertaining to digital access/use and digital literacy across governments, civil society, and academia to support policy learning, innovation, and accountability, and
- (c) deliver targeted digital literacy and cybersecurity training for women, girls, and marginalised groups to enhance their skills and confidence in using technology safely.

From the above recommendations, (a) to (c) can be seen as a continuum (of necessary action) to be taken to protect the rights of women in participating in what is, in fact, a democratising space. They can also be seen as actions to be taken, independent of each other, as necessary for the protection of citizen's rights to participate in a public space and protection from physical (and virtual) harm. The use of early warning indicators and monitoring tools is already understood as being beneficial but the connection between them and the region's women, peace and security agenda (reflected in the WPS regional plan) is not fully appreciated. In terms of the frameworks listed that provide a strong foundation for ASEAN to translate its commitment to advance the WPS agenda in the region,¹⁶⁵ those covering digital security/cyber security in the region, such as the ASEAN Digital Masterplan 2025¹⁶⁶ and the ASEAN Cybersecurity Cooperation Strategy¹⁶⁷ are absent. The Masterplan does however emphasise the importance of inclusion in the following paragraph:

In terms of digital inclusion, multiple initiatives are being pursued at the member state level. These include initiatives by national governments, such as Singapore's 'Seniors Go Digital' programme, as well as actions taken by businesses, international charities and local organisations. In many cases, different entities will work together in partnership to deliver a project. ^{[83] 168}

As a matter of fact, the only reference to terms like 'women and girls' in the report is mentioned in a footnote (83)¹⁶⁹ at the end of the extract above.

¹⁶⁵ ASEAN (2022), *ASEAN Regional Plan of Action on Women, Peace and Security*: p15

¹⁶⁶ ASEAN (2025) *ASEAN Digital Masterplan 2025*. Jakarta, Indonesia: ASEAN Secretariat. <https://asean.org/wp-content/uploads/2021/09/ASEAN-Digital-Masterplan-EDITED.pdf>

¹⁶⁷ ASEAN (2025) *ASEAN Cybersecurity Cooperation Strategy (2021-2025)*, [draft]. https://asean.org/wp-content/uploads/2022/02/01-ASEAN-Cybersecurity-Cooperation-Paper-2021-2025_final-23-0122.pdf

¹⁶⁸ ASEAN (2025) *ASEAN Digital Masterplan 2025*: p120.

¹⁶⁹ Footnote 83 provides these two sources on page 120 of the *ASEAN Digital Masterplan 2025*. From Thailand: <https://news.itu.int/spotlight-digital-inclusion-girls-women-rural-thailand/> and from the Philippines https://www.goodthingsfoundation.org/sites/default/files/phillippines_pilot_report_v2.pdf

3.2.1 Entry points in the ASEAN WPS RPA

Although not mentioned in great detail, there is explicit reference to digital and cyber security threats in the WPS RPA. For example, for one of the outcome indicators that needs to be measured, under Strategic Outcome 1 (protection matrix), is the:

*Number of mechanisms in place to monitor, prevent and respond to violence against women in politics, as well as women serving in the armed forces and police (**including online violence**) [for emphasis], and to track reports of SGBV involving the armed forces, police and other peace and security personnel.*¹⁷⁰

And priority action 1.1.8, under this matrix also emphasises enhancing “the capacity to collect and analyse data on SGBV incidence and SGBV service provision at local, national and regional levels...”¹⁷¹ which allows interpretation of community level early warning action both as a means of data collection and as anticipatory action. In similar vein, priority action 2.2.1 and 2.2.2 call for systematising the collection and analysing of baseline (and regular collection of) data in both traditional and non-traditional security concerns, which would include digital and cybersecurity.¹⁷² Action 2.2.3 promotes the effective and inclusive participation in channels, tools and guidelines (including digital ones) for crisis-affected women, and GBV survivors, among others.¹⁷³

Under the prevention matrix, one of the outcome indicators is to look at member states that have gender-responsive early warning systems, which would include the regular collection and analysis of this data on conflict and violence, including data from marginalised groups to encourage early intervention and risk mitigation.¹⁷⁴ Output 3.1 does mention mainstreaming gender and engaging women in countering violent extremism and preventing cybersecurity threats.¹⁷⁵ Gender-responsive early warning mechanisms, which includes strategies to address cybersecurity issues present another entry-point for the use of EWS in the WPS RPA. An example of how this digital EWS might work is through social listening.

¹⁷⁰ ASEAN (2022), *ASEAN Regional Plan of Action on Women, Peace and Security*: p21

¹⁷¹ ASEAN (2022), *ASEAN Regional Plan of Action on Women, Peace and Security*: p22

¹⁷² ASEAN (2022), *ASEAN Regional Plan of Action on Women, Peace and Security*: p26

¹⁷³ Ibid.

¹⁷⁴ ASEAN (2022), *ASEAN Regional Plan of Action on Women, Peace and Security*: p29

¹⁷⁵ Ibid.

Community social listening¹⁷⁶ for online harms against women and girls is imperative because they form signposts to help flag deliberate gender-based online violence whether doxxing,¹⁷⁷ targeted hate speech, or inciting harms against an individual or group, for example, indigenous women, women from ethnic/racial minority groups or women in sexual minority groups. The effectiveness of this sort of monitoring would include both online and offline ecosystems¹⁷⁸ as harmful narratives can spread across digital platforms and into real-life conversations, influencing diverse audiences. An online/offline monitoring provide a clearer understanding of critical narratives or threats.¹⁷⁹ Employing social listening for misogynistic comments and the targeting of women might also be done using tools of Artificial Intelligence or A.I.¹⁸⁰ Such AI-assisted EWS needs to be undertaken with safeguards such as instituting bias audits, privacy safeguards, and the human-in-the-loop programmes.¹⁸¹

The WPS RPA is only as effective as its monitoring and data collection strategies. Incidence of digital VAW can also be seen as early warning signals which can then help out in creating and monitoring confidential and safe reporting systems. The ASEAN Regional Action Plan on Eliminating Violence Against Women already recognises technology-facilitated violence¹⁸² and such data can support *Action 5: Research and Data Collection*¹⁸³ as well as *Action 6: Management Coordination Monitoring and Evaluation*,¹⁸⁴ allowing for coordination between regional architecture around WPS and eliminating VAW.

There is very little policy research or evidence-based study that highlights the different gendered impacts of cybersecurity and cybercrime in the region. Considering the intersection of violent extremism, cybersecurity and gender presents an opportunity to enhance conflict prevention. ASEAN has the fastest-growing Internet market globally.¹⁸⁵ Cyber threats become increasingly critical, especially as they enable other security issues like violent extremism and transnational crime. Current cybersecurity policies miss gender perspectives, addressing the aggressor and defence of the state but not responding to individual (gendered)

¹⁷⁶ Community social listening is a way of systematically collecting, analysing and responding to what people in a community are saying, and involves listening to many channels including WhatsApp groups, social media, hotlines, community leaders' feedback etc. It functions as an ongoing loop of listening-analysing-acting

¹⁷⁷ Doxxing involves the search for and publishing of private/identifying information about an individual online, with malicious intent. This will expose the individual to potential (physical) violence and harassment.

¹⁷⁸ UNHCR (2024) *Planning Social Listening Activities*. UNHCR 20 Dec 2024.

<https://www.unhcr.org/handbooks/informationintegrity/practical-tools/social-listening-guidelines/planning-social-listening-activities>

¹⁷⁹ Ibid.

¹⁸⁰ UNU Macau (2024). *Artificial Intelligence and the Women, Peace and Security Agenda in Southeast Asia*. UN Women Regional Office for Asia and the Pacific. https://unu.edu/sites/default/files/2024-05/Artificial%20Intelligence%20and%20the%20Women%2C%20Peace%20and%20Security%20Agenda%20in%20South-East%20Asia.pdf?utm_source=chatgpt.com#page=2.11

¹⁸¹ Ibid.

¹⁸² ASEAN (2016). *ASEAN Regional Plan of Action on Elimination of Violence Against Women*. ASEAN Secretariat. Jakarta, Indonesia.

<https://cil.nus.edu.sg/wp-content/uploads/2019/02/2016-2025-RPA-on-Elimination-of-Violence-against-Women-1.pdf>

¹⁸³ ASEAN (2016). *ASEAN Regional Plan of Action on Elimination of Violence Against Women*: p.25

¹⁸⁴ ASEAN (2016). *ASEAN Regional Plan of Action on Elimination of Violence Against Women*: p.26

¹⁸⁵ World Economic Forum (2022). Digital ASEAN. <https://www.weforum.org/projects/digital-asean/>

vulnerabilities.¹⁸⁶ There is however mention of online threats of violent extremism and using early warning mechanisms (output 3.1) as well as technical cooperation across the ASEAN region (priority action 3.1.1) to address and prevent violent extremism as well as other threats to peace.¹⁸⁷

Any success to using GEWS in the digital ecosystem must ensure that the set-up is localised, is well-coordinated, must build capacity for local communities, must involve partnerships with not only local security forces but must also work together with private sector and tech platforms, and have to be innovative – harnessing AI and/or other technologies in creating effective digital EWS tools, while being mindful of inherent gender bias in such technologies.

3.3 Recommendations

Online VAW is an escalating threat in Southeast Asia, as it is globally, systematically undermining women’s participation in politics, peace processes, and in digital spaces. Online VAW often spills over into offline physical violence further curtailing women’s freedom of participation and expression thus eroding trust in democratic and peacebuilding institutions. This will point directly to the legitimacy of the state. The following recommended actions are for digital GEWS that might be used where stated in the WPS RPA.

1. Community social listening and monitoring

- Create women-led online social listening to act as ‘sign-posts’ at community level to capture signals of online VAW, doxxing, etc. and to work together with community offline social listening to monitor spillover effects from virtual to physical space.
- Create safe digital reporting channels linked to national law-enforcement cyber units.
- Train women’s groups, digital rights advocates, and journalists as frontline ‘sensors’ of online VAW.
- Create safe, anonymous reporting mechanisms at sub-national levels linked to ASEAN’s WPS monitoring at national/ regional levels.
- Empower youth and women’s networks as digital peacebuilders.

2. Data collection using Digital EWS

- Develop gender-sensitive indicators (e.g. volume of cyber-harassment reports, hate speech trends, doxxing attempts etc.) as part of online social listening ‘indicators’ and

¹⁸⁶ ASEAN And UN Women (2025). *Policy Research: Advancing Gender-Responsive Conflict and Crisis Prevention in ASEAN*. April 25, 2025. <https://wps.asean.org/resources/policy-research-advancing-gender-responsive-conflict-and-crisis-prevention-in-asean/>

¹⁸⁷ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p29

to function as a data collection method to monitor online VAW thus coordinating the RPAs of WPS and eliminating VAW in the region.

- Ensure sex-disaggregated reporting in ASEAN's digital monitoring frameworks.
- Use AI and big data analytics to detect patterns of online abuse.
- Establish regional monitoring hubs with social media platforms, Internet providers, and civil society.
- Create an ASEAN digital risk dashboard to issue early alerts of increasing technology-facilitated VAW.

3. Prevent cybercrime and violent extremism

- Treat digital violence as a risk to the protection of women and girls—an early sign of a fragile social/political environment. To also pay close attention to nature of digital violence because women can be both victims as well as perpetrators of such violence.
- Monitor extremist narratives online that target women and women leaders at grassroots levels and train women as well as male/female faith leaders to identify online radicalised and extremist views, especially at 'sensitive' times such as during natural disasters, pandemics, conflicts, elections.
- Integrate online VAW prevention into ASEAN Digital Masterplan 2025 and ASEAN Cybersecurity Cooperation Strategy.
- Ensure digital alerts are tied to offline protection systems (legal aid, psychosocial support, survivor services).

3.4 Conclusion

By embedding gendered early warning systems in the digital ecosystem in the WPS RPA, we hope to reduce women's digital non-participation caused by harassment (prevention), strengthen women's freedom of expression in politics, peacebuilding, and public debate (participation), and shift responsibility away from individual women fending for themselves or removing themselves from the threat, to channelling accountability to actors that should be responsible such as governments, platform creators and users. Early warning in the digital domain is no longer optional—it is a frontline of women's security in Southeast Asia. By embedding digital GEWS into the ASEAN WPS RPA, member states can anticipate risks before they escalate, protect women peace actors, and reinforce the credibility of ASEAN's leadership on Women, Peace and Security.

4. The Need for Gendered EWS for Health Crisis Situations

I will endeavour to take dignity as the pivotal principle that permeates the right to health. As Tlaleng Mofokeng, a Black woman myself, I understand that people are not intrinsically vulnerable, but that these vulnerabilities are rather brought by the obstacles they face in the social, economic and political contexts they live in.

~ Dr Tlaleng Mofokeng, UN Special Rapporteur on the Right to Health ~

Health crises destabilise systems. The COVID-19 pandemic has highlighted how destabilising a health crisis could be for global systems, exposing vulnerabilities across healthcare, supply chains, and social protection.¹⁸⁸ Disease outbreaks, disasters, and poverty, and the quality of healthcare provided to women and girls in these instances have affected their life expectancy, particularly in developing countries.¹⁸⁹ Census information across 141 countries on the impact of natural disasters and the specific vulnerability of girls and women during extreme events show that crisis situations lower the life expectancy in women more than in men. The study also found that the effect of the gender gap in life expectancy is proportional to the severity of disaster. Bigger crisis led to more severe impacts on women's life expectancy compared with that of men. It also confirmed that the gender gap in life expectancy varied inversely to the women's socioeconomic status. The same study highlighted that physical differences between men and women are unlikely to explain these differences. Societal norms may provide some additional explanation to these trends.¹⁹⁰

4.1 Gender-based health inequalities

A society's gender norms and values shape the roles and relationships assigned to men and women within the culture, which gives rise to the differences and inequalities between the sexes. These inequalities are systematically ingrained into other aspects of their lives, often paying attention to the needs of one gender over the other. It can therefore give rise to

¹⁸⁸ UNDP (2021). *Responding to the COVID-19 pandemic: Leaving no country behind*. Bangkok: UNDP Regional Bureau for Asia and the Pacific, <https://www.undp.org/sites/g/files/zskgke326/files/publications/UNDP-RBAP-SDG-Responding-to-COVID-19-Pandemic-Leaving-No-Country-Behind-2021.pdf>.

¹⁸⁹ UN Women (2020). *Policy brief: The impact of COVID-19 on women*. New York: UN Women, <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2020/Policy-brief-The-impact-of-COVID-19-on-women-en.pdf>.

¹⁹⁰ Eric Neumayer and Thomas Plümpert, "The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981–2002," *Annals of the Association of American Geographers* 97, no. 3 (2007): 558–560.

inequities between men and women in health status and access to health care.¹⁹¹ For example, a woman cannot receive needed health care because societal expectations within her community prevent her from travelling alone to a clinic. Such cultural norms could lead to adverse health consequences, particularly during a health crisis as they make women and girls are more vulnerable to inadequate healthcare.¹⁹² Statistics corroborate these society-based gender inequalities and underscore the importance of gender-specific EWS in protecting the life expectancy and health of women and girls. The WPS agenda further highlights this by drawing importance to the role of women in peace and security. Building on the agenda, ASEAN's WPS RPA recognises that women play a vital role not only in traditional peace and security efforts but also in responding to non-traditional threats, such as health emergencies and other crises.¹⁹³

4.2 Health crises in ASEAN

Health crises are not only medical events but also significant challenges to peace, security and stability of a country. In ASEAN, health crises have repeatedly destabilised societies by straining healthcare systems, disrupting economies and deepening existing inequalities. From global pandemics to climate-linked diseases and malnutrition, ASEAN faces a spectrum of health challenges that spans across governance, social cohesion, and gender relations.¹⁹⁴ Understanding these crises is essential for grasping how health insecurity threatens broader regional stability.

4.2.1 Pandemics

Global outbreaks such as the COVID-19 pandemic had impacted women and girls significantly in Southeast Asia.

During the COVID-19 pandemic, many countries were forced into lockdown, with strict mandates for people to stay at home. This caused women to carry the heavier burden in the pandemic. Staying at home did reduce the number of coronavirus cases, however, in some instances it did increase the exposure of women to intimate partner violence in abusive homes. The Malaysian government reported that its national crisis and welfare hotline, *Talian Kasih*,

¹⁹¹ Asian Development Bank (2014). *Gender-inclusive disaster risk management*, Asian Development Bank, Manila, <https://www.adb.org/sites/default/files/institutional-document/34130/files/gender-inclusive-disaster-risk-management-0.pdf>

¹⁹² World Health Organization (2014). *Global status report on noncommunicable diseases 2014*, World Health Organization, Geneva, https://iris.who.int/bitstream/handle/10665/144781/9789241508186_eng.pdf.

¹⁹³ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*. Jakarta: ASEAN Secretariat, <https://asean.org/wp-content/uploads/2022/11/32-ASEAN-Regional-Plan-of-Action-on-Women-Peace-and-Security.pdf>.

¹⁹⁴ UNDP (2021). *Responding to the COVID-19 pandemic: Leaving no country behind*. Bangkok: UNDP Regional Bureau for Asia and the Pacific, <https://www.undp.org/sites/g/files/zskgke326/files/publications/UNDP-RBAP-SDG-Responding-to-COVID-19-Pandemic-Leaving-No-Country-Behind-2021.pdf>.

received 57 percent more calls from women during the time when the lockdown was imposed. Domestic violence was cited as one of the main reports by the women.¹⁹⁵ Similarly in Indonesia, the Legal Aid Foundation of the Indonesian Women's Association for Justice (LBH APIK), a legal organisation that provides support to women to protect their rights, received thrice the number of domestic violence reports in the two weeks after the lockdown orders were imposed. The organisation highlighted that the numbers were concerning as it was the highest, they had ever recorded in a two-week period.¹⁹⁶ A gendered EWS would help take into consideration these negative impacts that pandemic lockdowns could bring about and therefore have plans to help women equip themselves better and prevent the increase of domestic violence cases. Increased cases of violence against women often indicate systemic and societal stressors as a result of some form of 'upheaval' such as natural disasters, economic crisis, or in this case, a global pandemic.

The COVID-19 pandemic also showed the important role women play in the healthcare system, further emphasising why it is important for a gendered EWS. Women make up 70 percent of healthcare workforce.¹⁹⁷ According to a New York Times chart, healthcare workers, particularly nurses, had the highest risk of contracting the virus. This is because their occupation requires them to frequently be in close proximity with patients.¹⁹⁸ This is particularly concerning in the ASEAN region as 79 percent of nurses in Southeast Asia are women. In Malaysia alone, 3,000 retired nurses rejoined the healthcare sector during the pandemic, to fight on the frontlines. Indonesia, which had the highest number of COVID-19 deaths in Asia, has more women than men as medical practitioners.¹⁹⁹ The role of women in the healthcare sector further highlights the importance of involving women in EWS as they play a critical role in international health emergencies.

¹⁹⁵ Investing in Women Asia (2020). *The disproportionate effect of COVID-19 on South-East Asian women: Case studies from Malaysia and Indonesia*, <https://investinginwomen.asia/posts/the-disproportionate-effect-of-covid-19-on-south-east-asian-women-case-studies-from-malaysia-and-indonesia/>.

¹⁹⁶ Nur Rakhmawati, "Indonesia's Rise in Domestic Violence during the COVID-19 Pandemic: Why It Happens and How to Seek Help," *The Conversation*, 2020, <https://theconversation.com/indonesias-rise-in-domestic-violence-during-the-covid-19-pandemic-why-it-happens-and-how-to-seek-help-142032>.

¹⁹⁷ UN Women (2020). *COVID-19 and its impact on women*, <https://interactive.unwomen.org/multimedia/explainer/covid19/en/index.html>.

¹⁹⁸ Pam Belluck, "Women on the Front Lines of Coronavirus Face Greater Risk," *The New York Times*, March 12, 2020, <https://www.nytimes.com/2020/03/12/us/women-coronavirus-greater-risk.html>.

¹⁹⁹ Investing in Women Asia (2020). *The disproportionate effect of COVID-19 on South-East Asian women: Case studies from Malaysia and Indonesia*, <https://investinginwomen.asia/posts/the-disproportionate-effect-of-covid-19-on-south-east-asian-women-case-studies-from-malaysia-and-indonesia/>.

4.2.2 Disease Outbreaks

The 2016 Zika virus (ZIKV) outbreak and other climate-linked diseases such as the persistent spread of dengue and malaria have also had a significant impact on women, particularly in terms of maternal health.

Maternal health refers to the health of women during pregnancy, childbirth and the post-natal period. Ensuring that women have a positive experience throughout this period is critical for the health and well-being of mothers and their babies. The most common reasons for maternal injury and death are infections, loss of blood, preeclampsia (high blood pressure), unsafe abortion, obstructed labour, and other indirect causes such as Malaria, Anaemia and heart disease. Most maternal deaths are preventable when complications are dealt with promptly by a skilled health professional within a supportive environment.²⁰⁰ Addressing inequalities that affect the health outcome of women, particularly sexual and reproductive health and rights is key to ensure women have access to respectful and quality maternal care.²⁰¹

In February 2016, the World Health Organisation (WHO) declared that there was a ZIKV outbreak in South America. It described it as an *international public health emergency* as it was associated with an increase in neurological disorders and neonatal deformations.²⁰² Women who are infected in their first and second trimester of their pregnancy are more likely to have infants born with central nervous system anomalies such as microcephaly and/or experience preterm birth and miscarriage. Pregnant women were particularly warned to be cautious by minimising mosquito bites and to reduce sexual transmission risk.²⁰³

Although Southeast Asian countries ramped up their efforts to destroy mosquito breeding grounds and raise public awareness in provinces where ZIKV was detected, the virus spread to pregnant women. In Thailand, there were 350 cases of people reported to have the virus by October 2016, including pregnant women.²⁰⁴

Now, ZIKV is seen as an endemic in Thailand with peaks in cases during the wet season in June and July. It has resulted in babies being delivered with microcephaly or diagnosed with

²⁰⁰ World Health Organization, n.d., *Maternal health*, World Health Organization, https://www.who.int/health-topics/maternal-health#tab=tab_1.

²⁰¹ Global Heat Health Information Network (2019). First GHHIN Southeast Asia Heat Health Forum: Summary report, Global Heat Health Information Network, <https://heathealth.info/wp-content/uploads/First-GHHIN-Southeast-Asia-Heat-Health-Forum-Summary-Report.pdf>.

²⁰² World Health Organization, n.d., *Zika virus*, <https://www.who.int/news-room/fact-sheets/detail/zika-virus>.

²⁰³ World Health Organization (2016). 'WHO calls for stronger measures against Zika as Thailand confirms disease-related microcephaly', <https://www.who.int/southeastasia/news/detail/30-09-2016-who-calls-for-stronger-measures-against-zika-as-thailand-confirms-disease-related-microcephaly>.

²⁰⁴ BBC News (2016). 'Zika virus: Thailand confirms microcephaly cases', *BBC News*, <https://www.bbc.com/news/world-asia-37548723>.

developmental abnormalities.²⁰⁵ As pregnant women are directly affected by the spread of this virus, it is important to engage and prepare them prior to the active season to protect them from the virus. Increased instances of pre-term babies, for instance, can indicate burgeoning cases of the virus in a locality, which should alert public health officials.

Similarly, Malaria is another disease that threatens the maternal health of women in the Asia-Pacific region. The number of malaria cases in this region have increased in the past few years, reaching 2.4 million in 2024. According to an analysis that was presented by the Asia Pacific Leaders Malaria Alliance at the 9th Asia Pacific Leaders' Summit on Malaria Elimination, the number of reported cases surged by 170 percent between 2021 and 2024. The increase has been attributed to climate change, insecticide resistant strains, and instances of conflict and funding challenges. According to the WHO, rising temperatures could further increase the transmission of Malaria in wetter regions of the world.²⁰⁶

Studies suggest that pregnant women are more susceptible to Malaria as compared to non-pregnant women. This is due to changes in their daily behaviour during pregnancy and the physiological factors that they experience. Pregnant women tend to leave the protection of their mosquito net at night to use the toilets twice as frequently as non-pregnant women, exposing themselves to mosquito bites. Malaria infections increase the risk of severe morbidity and mortality to pregnant women, fetuses, and newborns. Studies have shown that maternal Malaria heightens the threat of spontaneous abortion, premature delivery, stillbirth and low birth weight in newborns.²⁰⁷

In Southeast Asia, Malaria has been a persistent problem, particularly in the Greater Mekong Region (Cambodia, Myanmar and Thailand).²⁰⁸ Despite the risks associated with Malaria during pregnancies, a research study conducted by the Malaria Consortium showed that there was a serious lack of key information on the demographics of pregnant women infected with Malaria within the region. Only information on the overall spread of Malaria has been carefully recorded. Although Malaria can cause serious complications among pregnant women, little has been done to draw information about those who are infected. In Cambodia, Malaria clinics, hospitals, and health centres do not keep records of pregnant women who were diagnosed with Malaria. Only Village Malaria Workers (VMW) in 17 provinces and some NGOs

²⁰⁵ World Health Organization (2023). *Zika virus presentations*, https://cdn.who.int/media/docs/default-source/epi-win/zika-30sept23_presentations.pdf?sfvrsn=301685da_2.

²⁰⁶ Adriano, J. (2023). *Malaria elimination chances receding in Asia-Pacific*, Sabin Vaccine Institute, Washington, DC, <https://www.sabin.org/resources/malaria-elimination-chances-receding-in-asia-pacific/>.

²⁰⁷ World Health Organization (2014). *Global status report on noncommunicable diseases 2014*, World Health Organization, Geneva, https://iris.who.int/bitstream/handle/10665/144781/9789241508186_eng.pdf.

²⁰⁸ Md Hanif, S. A., Hassan, M. R., Safian, N., Sutan, R., Alabed, A. A. A., Rafi'i, M. R., Md Asari, S. N., Naserrudin, N. A., & Dapari, R. (2025). Malaria and determinants of health: a scoping review of malaria vulnerabilities in Southeast Asia. *Tropical medicine and health*, 53(1), 105. <https://doi.org/10.1186/s41182-025-00784-8>.

have records of the information. Similarly in Thailand, most health professionals do not record the pregnancy status of female Malaria patients. In Myanmar, only those who seek healthcare are recorded in the system. This potentially excludes ethnic minorities and other marginalised groups. There is no active system to diagnose pregnant women in villages for Malaria, should they show any symptoms. In many villages in the Greater Mekong, Malaria is diagnosed at an early stage. However, most health workers are only able to treat symptomatic infections of non-pregnant women.²⁰⁹

Although ASEAN's EWS are strong on disease surveillance, they overlook the specific healthcare needs of women and girls as well as the vital, life-saving roles women can play.²¹⁰ The absence of gender-disaggregated data and the neglect of pregnant women in Malaria surveillance expose a critical weakness in ASEAN's health security systems. This gap shows that Malaria is not simply a "disease burden" but a gendered security issue. Without integrating gender sensitivity, women's vulnerabilities remain unaddressed and resources to meet their needs invisible, undermining both crisis response and the broader WPS agenda.²¹¹ Embedding gender perspectives into EWS is therefore essential to make health crisis responses more effective, equitable, and sustainable in ASEAN.

The experiences of Zika and Malaria in Southeast Asia illustrate how maternal health is uniquely endangered during health crises. Yet, because surveillance and response mechanisms are not systematically gendered, pregnant women remain under-served and unprotected. This gap underscores why ASEAN's health early warning systems must be reoriented to include gendered vulnerabilities if they are to fulfil both their public health function and their peace and security mandate under the WPS RPA.

4.2.3 Natural disasters

Health crises also place maternal and reproductive health at particular risk during natural disasters. During disasters, health facilities are often destroyed or overwhelmed, supply chains disrupted, and healthcare personnel diverted to emergency response.²¹² This can leave

²⁰⁹ Malaria Consortium (2014). *Malaria in pregnancy in Southeast Asia: Dissemination document*, https://www.malariaconsortium.org/media-library/media-files/201404141048-malaria-in-pregnancy-in-s-e-asia_dissemination-dt.pdf.

²¹⁰ Chawarat Sa-ngamuang, Somporn Lawpoolsri, Myo Su Yin, et al., "Assessment of Malaria Risk in Southeast Asia: A Systematic Review," *Malaria Journal* 22 (2023): 339. <https://doi.org/10.1186/s12936-023-04772-3>.

²¹¹ Kiran Singh, Anjali Bassi, Hiroshi Morita, Tuan Tran, Li Chen, Sunil Kumar, Farhana Rahman, and Takashi Yamamoto, "Community Engagement and Gender-Sensitive Approaches in Health Emergency Preparedness: Lessons from Asia-Pacific," *Journal of Global Health* 12 (2022):12. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9142739/pdf/main.pdf>.

²¹² Asian Development Bank (2014). *Gender-inclusive disaster risk management*, Asian Development Bank, Manila, <https://www.adb.org/sites/default/files/institutional-document/34130/files/gender-inclusive-disaster-risk-management-0.pdf>

women without access to safe deliveries, contraception, or prenatal and postnatal care. The consequences are often immediate and life-threatening.

The 2013 Typhoon Haiyan in the Philippines illustrates these challenges. The storm, one of the strongest ever recorded, devastated hospitals and clinics across affected provinces. Women in need of maternal health services often found facilities non-functional or unreachable, while shortages of skilled health professionals and medical supplies further compounded risks.²¹³ A study that conducted interviews with women who were pregnant during the disaster found that most of them knew that a typhoon was coming but did not recognise the need to evacuate. The pregnant women already had several typhoon experiences, and they had never had any major problems previously. For that reason, they underestimated the catastrophic nature of this typhoon.²¹⁴ Reports from humanitarian agencies also documented cases of women giving birth in unsafe conditions, with little or no professional assistance.²¹⁵ The breakdown of reproductive health services also led to an increase in unintended pregnancies and heightened vulnerability to sexual and gender-based violence in displacement camps.

From a WPS perspective, such poor healthcare for women, particularly those who are pregnant, extend beyond just individual health outcomes. They erode women's trust in state institutions and create long-term demographic changes in the country. Ensuring that maternal and reproductive health remains protected during emergencies is therefore not only a public health necessity but also a matter of human security.²¹⁶ This underscores the value of GEWS, which can help anticipate service disruptions, pre-position maternal health supplies, and mobilise women's networks to safeguard reproductive health even in the midst of crisis.

²¹³ Martínez-García, D., (2014) 'Restoring health after Typhoon Haiyan', *ResearchGate*. Available at: https://www.researchgate.net/profile/Daniel-Martinez-Garcia/publication/262421639_Restoring_health_after_Typhoon_Haiyan/links/5a7d9ad5aca272341aef623d/Restoring-health-after-Typhoon-Haiyan.pdf.

²¹⁴ Masako Sato, Yoko Nakamura, Fumiko Atogami, Rie Horiguchi, Rina Tamaki, Takashi Yoshizawa, and Hitoshi Oshitani, "Immediate Needs and Concerns among Pregnant Women During and after Typhoon Haiyan (Yolanda)," *PLoS Currents* 8 (2016): 8. <https://doi.org/10.1371/currents.dis.29e4c0c810db47d7fd8d0d1fb782892c>.

²¹⁵ UNFPA (2013). *UNFPA estimates 200,000 pregnant women need help in aftermath of Super Typhoon Haiyan*. <https://www.unfpa.org/news/unfpa-estimates-200000-pregnant-women-need-help-aftermath-super-typhoon#:~:text=UNFPA%20Estimates%20200%2C000%20Pregnant%20Women,Typhoon%20%7C%20United%20Nations%20Population%20Fund>.

²¹⁶ Georgetown Institute for Women, Peace and Security (2023). *Women, Peace, and Security Index 2023*, Georgetown University, Washington, DC, <https://giwps.georgetown.edu/wp-content/uploads/2023/10/WPS-Index-full-report.pdf>; United Nations Population Fund. (2015). *State of World Population 2015: Shelter from the storm – a transformative agenda for women and girls in a crisis-prone world*, <https://www.unfpa.org/ru/swop-2015#:~:text=Conflicts%20and%20disasters%20can%20make,rape%2C%20early%20marriage%20and%20trafficking>.

4.2.4 Malnutrition

In ASEAN, malnutrition in the form of both under- and over-nutrition, affects not only the most vulnerable groups, children, and pregnant and lactating women, but also the wider population. Its immediate causes often lie in poor dietary intake, recurrent illnesses, and limited physical activity.²¹⁷ Beneath these are deeper, structural drivers such as restricted access to affordable and diverse nutritious foods, inadequate maternal and childcare, poor feeding practices, and gaps in health services.²¹⁸ Environmental challenges such as drinking unsafe water, poor sanitation, and lack of proper hygiene further compound the problem. These conditions are themselves shaped by broader socio-economic inequalities and political constraints, making malnutrition a complex issue that extends far beyond individual choices.²¹⁹

According to the World Bank, malnutrition costs ASEAN Member States as much as 2–3 percent of their GDP each year through lost productivity and higher healthcare expenses. For low- and middle-income countries, this creates a major financing gap, as the resources needed to meet nutrition targets far exceed available funds. ASEAN Member States face significant challenges in addressing malnutrition at the regional level.²²⁰ Regional level coordination to deliver nutrition-specific and nutrition-sensitive food has been poor and there has been a reluctance in improving the programmes to reduce malnutrition in ASEAN due to the significant financial burden it costs countries.²²¹ This lack of action and support are particularly damaging for women and girls, who already face higher risks of food insecurity and maternal health complications, making nutrition both an economic and a gendered security issue.

Malnutrition in Southeast Asia is not just a public health challenge but a deeply gendered one. Women bear its burden both biologically and socially, experiencing the direct health consequences of poor nutrition while also carrying the primary responsibility for household food and childcare. A 2021 ASEAN Food and Nutrition Security Report revealed that 26.5 percent of women of reproductive age in the region are anaemic, a condition that threatens

²¹⁷ ASEAN, UNICEF, and WHO (2016). *Regional report on nutrition security in ASEAN: Volume 2*. ASEAN Secretariat. <https://www.asean.org/wp-content/uploads/2016/03/Regional-Report-on-Nutrition-Security-in-ASEAN-Volume-2.pdf>.

²¹⁸ Janice Catampongan, Anita N. Dewi, and Jennifer F. D. Rosa, "ASEAN Ramps Up Initiatives to End Malnutrition in the Region," *The ASEAN Magazine*, 2024, <https://theaseanmagazine.asean.org/article/asean-ramps-up-initiatives-to-end-malnutrition-in-the-region/>.

²¹⁹ ASEAN, UNICEF, and WHO (2016). *Regional report on nutrition security in ASEAN: Volume 2*. ASEAN Secretariat. <https://www.asean.org/wp-content/uploads/2016/03/Regional-Report-on-Nutrition-Security-in-ASEAN-Volume-2.pdf>.

²²⁰ World Bank (2019). *Addressing the double burden of malnutrition in ASEAN*, World Bank, Washington, DC, <https://documents1.worldbank.org/curated/en/804731578325978325/pdf/Addressing-the-Double-Burden-of-Malnutrition-in-ASEAN.pdf>.

²²¹ Janice Catampongan, Anita N. Dewi, and Jennifer F. D. Rosa, "ASEAN Ramps Up Initiatives to End Malnutrition in the Region," *The ASEAN Magazine*, 2024, <https://theaseanmagazine.asean.org/article/asean-ramps-up-initiatives-to-end-malnutrition-in-the-region/> and Josephine Adriano, *Malaria Elimination Chances Receding in Asia-Pacific* (Washington, DC: Sabin Vaccine Institute, 2023), <https://www.sabin.org/resources/malaria-elimination-chances-receding-in-asia-pacific/>.

safe pregnancy and childbirth and passes risks on to infants.²²² When women's food intake is not balanced, it is not only their own health that suffers but also that of their children, perpetuating cycles of malnutrition across generations.

Evidence shows that malnutrition during pregnancy and early childhood has lifelong consequences. Stunting in children, which is linked to poor maternal nutrition, limits growth, cognitive capacity, and earning potential in adulthood. This intergenerational link underscores how gender inequality drives malnutrition and, in turn, how malnutrition deepens gender inequality. This can be seen as a serious flaw in state capacity considering the implications on future generations. Women with limited access to health and nutrition services are less able to ensure adequate diets for themselves or their children, reinforcing vulnerabilities.²²³

Urbanisation and climate change further intensify women's nutritional challenges. As more women enter the workforce, dependence on convenience foods has risen, leaving households exposed to food price shocks and aggressive marketing of unhealthy products.²²⁴ Meanwhile, the urban poor, many of whom were women working in informal sectors, often spend over half their income on cheap, calorie-dense foods.²²⁵ Climate-related shocks, from floods to droughts, not only reduce food availability but also increase women's caregiving and labour burdens, leaving them with less time and resources for infant and child feeding.

ASEAN has acknowledged the urgency of nutrition through the 2018 Declaration on Ending All Forms of Malnutrition and its Strategic Framework and Action Plan on Nutrition 2018–2030. But progress has been slow, and current approaches often fail to integrate women's perspectives and needs.²²⁶ A gender-sensitive nutrition agenda, empowering women with access to adequate nutrition, health services, and decision-making power is not only essential for achieving food security but also for advancing equality, resilience, and regional development.

From a peace and security perspective, malnutrition is not only a health concern but also a destabilising factor that fuels poverty, stunting, and cycles of inequality. As pregnant and

²²² ASEAN, UNICEF, and WFP (2022). *ASEAN food and nutrition security report 2021: Volume 2*. Jakarta, UNICEF. <https://asean.org/book/asean-food-and-nutrition-security-report-2021-volume-2-food-and-nutrition-security-country-profiles/>.

²²³ UNICEF (2023). *Malnutrition in mothers soars by 25 per cent in crisis-hit countries, putting women and newborns at risk*, <https://www.unicef.org/rosa/press-releases/malnutrition-mothers-soars-25-cent-crisis-hit-countries-putting-women-and-newborn>.

²²⁴ Global Panel on Agriculture and Food Systems for Nutrition (2017). *Urban diets and nutrition: Trends, challenges and opportunities for policy action*. London: Global Panel on Agriculture and Food Systems for Nutrition, <https://www.glopan.org/sites/default/files/Downloads/GlobalPanelUrbanizationPolicyBrief.pdf>.

²²⁵ Supaporn Nuampa, Pramote Tangsuksan, Kamonwan Sasiwongsaraj, Rujira Pungbangkadee, Supatcha Rungamornrat, Nattapong Dounghummes, Supattra Netniyom, and Chaitanya L. Patil, "Myanmar Immigrant Women's Perceptions, Beliefs, and Information-Seeking Behaviors with Nutrition and Food Practices during Pregnancy in Thailand: A Qualitative Study," *BMC Pregnancy and Childbirth* 24 (2024): 52. <https://doi.org/10.1186/s12884-024-06158-y>.

²²⁶ Erica Ludher and Maria Romero (2024). *State of Nutrition in Southeast Asia: Challenges and Policy Directions*, ISEAS-Yusof Ishak Institute, Singapore, <https://www.iseas.edu.sg/?p=66610>.

lactating women face heightened nutritional demands, gendered vulnerabilities must be central to food security monitoring and crisis response. A gender-sensitive EWS could detect these risks earlier. For example, tracking food insecurity among women-headed households, maternal malnutrition, or disruptions to food supply chains that disproportionately affect women and children can help prepare and improve food supply chains for women.²²⁷ This would allow ASEAN states to respond before malnutrition escalates into a wider humanitarian and security crisis.

4.3 Women's health crises in ASEAN

The health crises in ASEAN, whether they are due to pandemics, diseases, natural disasters or malnutrition, have shown to impact women and girls disproportionately. Women face higher risks of maternal mortality, domestic abuse, food insecurity and access to critical reproductive or maternal health services. At the same time, women are not only victims but also play a key role in the healthcare sector, as community caregivers and to protect and nourish their families across the region. Yet, ASEAN's health EWS have little focus on the importance and role of women in health crises. It focuses on health surveillance and overall capacity to respond to health crises but fails to collect gender-specific data, acknowledge the unique vulnerabilities of women and to empower women by increasing their participation in EWS. This weakens both health crisis responses and the region's broader peace and security agenda, which will affect the stability of ASEAN Member States. Integrating gender sensitivity into EWS makes health crisis responses more effective and the needs and roles of women are not left invisible. The discussion above has shown the importance of having a gender sensitive approach to EWS. Instead of factoring GEWS on health in the different frameworks of ASEAN for example, ASEAN Agreement on Disaster Management and Emergency Response (AADMER), or the ASEAN Post-2015 Health Development Agenda²²⁸, WPS RPA, provides a number of entry points for such indicators, providing a more comprehensive framework for women's health security.

The ASEAN leaders' Joint Statement on WPS in 2017 encourages women's full participation in peace processes, including their inclusion in healthcare and pandemic response. Building on this, and in response to broader calls for the region to strengthen its focus on the agenda, the RPA identifies several areas for engagement. These include enhancing the collection and analysis of SGBV incidents at local, national, and regional levels to track progress and

²²⁷ FAO, IFAD, UNICEF, WFP and WHO (2021). *The State of Food Security and Nutrition in the World 2021: Transforming food systems for food security, improved nutrition and affordable healthy diets for all*. Rome: FAO, <https://openknowledge.fao.org/handle/20.500.14283/cb4474en>.

²²⁸ ASEAN (2023). *ASEAN Post-2015 Health Development Agenda (APHDA) 2021-2025*. Jakarta. ASEAN Secretariat, December, 2023. <https://asean.org/wp-content/uploads/2024/04/E-Publication-ASEAN-Post-2015-Health-Development-Agenda-for-2021-2025-1.pdf>

challenges in policy implementation and establishing mechanisms to strengthen multi-sectoral cooperation across ASEAN to address heightened SGBV risks in emergency, humanitarian, and conflict-affected settings. The RPA also calls for the integration of SGBV prevention programmes into climate change responses, cybercrime prevention, and other emerging security domains (Protection Matrix: Priority Actions 1.1.8 to 1.1.10).²²⁹ One of the measurable outputs (3.1) under the prevention matrix explicitly mentions early warning mechanisms and actions to prevent, “conflict and other risks to peace and security (such as disaster mitigation/displacement; trafficking in persons, **pandemics** [for emphasis], cyber security threats, climate change, and violent extremism”).²³⁰

Strategic Outcome 4 in the same matrix highlights the importance of monitoring and tracking reported cases of SGBV. It emphasises the need for initiatives at regional and national levels within peace and security institutions that focus on preventing SGBV in conflict and emergency situations. It also underscores the importance of ensuring that such institutions have early warning mechanisms in place for SGBV prevention, supported by clear, actionable guidelines for early intervention and rapid response to early warning signs.²³¹ Here we see a direct signal of using EWS in the RPA and this in itself functions as an indicator because the lack of such initiatives points to reduced state effectiveness in addressing the health and welfare of women in such crisis situations.

Under the relief and recovery matrix, there is ample discussion on the use of targets, data collection, and reporting. Though none of these actually specify GEWS, they can easily stand as proxy indicators for it. For example, reporting on one or more targets of the Sendai Framework for Disaster Risk Reduction using sex disaggregated data or collecting and utilising disaggregated data including sex, age, disability, and other variables to inform planning and implementation.²³²

However, despite the importance placed on women’s health especially in the aftermath of the COVID-19 pandemic, there are not many direct points of intervention for women’s health security in the regional plan itself – especially, for areas discussed above, such as malnutrition, maternal health/reproductive health etc., albeit the language is broad enough for wider interpretation of indicators of women’s health to be incorporated. Yet another setback is the

²²⁹ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p22

²³⁰ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p29

²³¹ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p31

²³² ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p34

limited focus on the care burden women face, which is often doubled or tripled in crisis situations.

To address this, ASEAN member states could establish easy-to-use data collection methods to gather both baseline and post-intervention information, disaggregated by sex, age, and other relevant variables. This could include GBV incidence rates, maternal mortality, and disruption of essential health services during emergencies or conflict. Such data could directly feed into the ASEAN WPS RPA's prevention and protection matrices, including outputs 3.1 on early warning mechanisms and Strategic Outcome 4 on monitoring SGBV prevention initiatives.

4.4 Recommendations

EWS, traditionally used for conflict and natural disasters, can and should be adapted to detect and respond to women's health vulnerabilities to avert gendered health crises. Linking GEWS with health indicators will strengthen ASEAN's commitment to WPS and the Sustainable Development Goals. Identifying gendered health risks will help to enhance national and even regional resilience to future pandemics, and disproportionate women's suffering during natural and man-made crises. The recommendations below outline what actions can be taken to improve/incorporate GEWS in health security.

1. To collect disaggregated data to identify and monitor women's healthcare developments

- Develop gender- and age-disaggregated health data (for example, access to reproductive care, maternal deaths during crises).
- Include proxy indicators in EWS such as spikes in gender-based violence reports, shortage of essential medicines, or disruptions in maternal clinics- these will help indicate women's health issues as well.
- Institutionalise civil society participation – with necessary funds backing – especially of women's organisations, in GEWS design and implementation.

2. To develop community-based early warning indicators for greater inclusion and participation of women

- Train community health workers and women's groups to act as first-line "sensors" of emerging health crises.
- Establish feedback loops from sub-national to national mechanisms so local-level women's public health issues may be brought to higher levels of attention.

- Allocate funding for capacity-building on gender-responsive health crisis monitoring.

3. To ensure greater cross-sectoral access and monitoring of women's health data, utilise digital and technological tools.

- Utilise mobile health platforms for reporting disruptions in women's health services.
- Integrate AI-driven predictive analytics into ASEAN's surveillance systems to forecast women's health-related vulnerabilities.
- Align health GEWS with conflict prevention and disaster risk reduction frameworks

4.5 Conclusion

Women's health crises — spanning maternal mortality, reproductive health disruptions, mental health challenges, and gender-based violence during pandemics, disasters, and conflict — pose significant risks to human security and state effectiveness. These crises are often under-recognised in traditional health and security frameworks, despite their potential to destabilise communities and exacerbate inequalities.

ASEAN has established strong cooperation on health and security through the ASEAN Post-2015 Health Development Agenda, the ASEAN Agreement on Disaster Management and Emergency Response (AADMER), and the Regional Plan of Action on Women, Peace and Security. However, women's health vulnerabilities are not systematically integrated into regional early warning and preparedness systems. The burden of care is not discussed enough even though a large part of such care, if not all of such care, falls on the shoulders of women. In addition, indicators of women's mental health and wellness, especially in times of crisis is not an area of focus in the RPA, during both traditional and non-traditional security crises. Possible anticipatory action, based on women health data is ostensibly not considered enough in regional health security frameworks. It would seem that if not for COVID-19, the role of women in healthcare as well as their disproportionate suffering during a health crisis (in various ways) would not be an area of 'interest' in the RPA. This, in fact, is indicative of a larger concern of state capacity and legitimacy where women's (human) rights are concerned.

Integrating GEWS in the WPS RPA will allow member states to detect emerging threats, prevent escalation, and design proactive responses. This aligns with ASEAN's vision of a resilient, people-centred, and inclusive community.

5. Inclusive Security in Practice: Gendered Early Warning for a Resilient ASEAN

Early warning is only effective when it sees through a gendered lens—because women’s insecurities, from violence to health crises, are not marginal, but warning signals of wider instability. Protecting women through gendered early warning is protecting communities.

The ASEAN Women, Peace and Security Regional Plan of Action (WPS RPA) has provided the region with a robust normative framework to address women’s security across peacebuilding, conflict prevention, and humanitarian response. Yet, as highlighted in the introduction, the gap between political pledges and lived realities remains wide. This is where gendered early warning systems (GEWS) become indispensable. By embedding anticipatory mechanisms into ASEAN’s peace and security architecture, the RPA can capture threats that disproportionately affect women—ranging from gender-based violence and health crises to online harassment.

Traditional early warning systems, designed around natural disasters or armed conflict, often overlook the differentiated vulnerabilities of women. GEWS, by contrast, illuminate how gender inequality shapes exposure to risks, access to services, and participation in decision-making. In doing so, they help reveal both visible and hidden fragilities within states, communities, and digital spaces. The multidimensional nature of fragility—political, economic, social, environmental, and digital—demands equally multidimensional tools. GEWS in different threat areas allow ASEAN to reconcile its aspiration for a people-centred community with practical mechanisms to safeguard the rights, dignity, and security of women across all contexts.

A unifying theme across all the chapters is the recognition of state fragility as multidimensional and gendered. Fragility is not limited to armed conflict but encompasses failures in service delivery, governance, and inclusivity. Gender inequality and violence against women—whether in hospitals, homes, or online—are not ‘social issues’ on the margins but core indicators of state effectiveness. The OECD’s multidimensional definition of fragility, when viewed through a feminist lens, reveals that even ‘stable’ states may harbour sub-national fragilities where women’s needs are unmet. For ASEAN, this means that health crises in rural

areas, online harassment of women politicians, or maternal mortality spikes are not isolated phenomena but early warning signals of eroding state legitimacy and capacity, especially in terms of protecting women's (human) rights and establishing a baseline of security for them.

5.1 The RPA and new spaces of VAW

New sites of vulnerability have emerged where women and girls face increased risks of gender-based violence as human insecurities evolve around the world. Structural inequalities and shifting social dynamics contribute to heightened risks in these settings. New sites of vulnerability expose women and girls to evolving forms of GBV, exacerbated by new challenges brought about by climate change, increased digital presence in our lives and global health emergencies. Addressing these issues requires integrated policies, gender-responsive humanitarian aid, and legal protections to prevent and respond to GBV in these spaces.

5.1.1 Climate security and natural disasters

Climate change is transforming Southeast Asia. Rising seas, prolonged droughts, and intensifying storms displace millions and erode livelihoods. For women in rural and agricultural sectors, these shocks are magnified by unequal land rights, limited access to credit, and caregiving responsibilities.

GEWS allow for the monitoring of gendered vulnerabilities, ensuring that evacuation, relief, and recovery efforts account for women's needs and contributions. Evidence from the Pacific Islands and Nepal shows that where women are actively involved in early warning design and dissemination, systems are more effective, fatalities are reduced, and recovery is more equitable.

For ASEAN, mainstreaming gender into climate adaptation and disaster risk reduction frameworks will be essential to building resilient societies. The ASEAN WPS RPA provides an overarching framework through which gendered EWS could be institutionalised. Existing ASEAN mechanisms, such as the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) and the ASEAN Framework on Anticipatory Action in Disaster Management, offer complementary operation platforms where GEWS could be applied. Linking these frameworks to the WPS RPA allows ASEAN to align disaster risk reduction with its broader peace and security agenda. For example, GEWS could help track indicators such as maternal mortality during crisis situations or reported cases of VAW in evacuation centres. Monitoring these indicators serve as an early warning red flag of longer-term state fragility.

It is equally important to note that women are not only vulnerable to climate insecurity but are also central to resilience during crisis situations. Female health workers, local leaders that enhance communication amongst women during disasters, and even women caring for children and elderly at home, play important frontline roles before, during, and in the aftermath of disasters. Therefore, it is important to recognise women as agents of resilience that improve disaster preparedness and response operations.

By embedding GEWS into the ASEAN WPS RPA and linking it to AADMER and the ASEAN Framework on Anticipatory Action in Disaster Management implementation, ASEAN could set a global benchmark for gender-responsive disaster management, transforming climate-induced fragility into an opportunity for regional leadership and moving closer to its Vision 2045 of an inclusive and resilient community.

5.1.2 Digital insecurity and online VAW

If health crises highlight the bodily dimensions of women's insecurity, the digital ecosystem reveals the virtual, yet equally real threats to women's participation. As explored in chapter 3, online violence against women — ranging from cyberstalking and doxxing to hate speech and non-consensual image sharing—has become a new frontier of gender-based insecurity. Far from being a marginal issue, online VAW undermines women's ability to participate in politics, journalism, and peace processes, thus threatening the legitimacy of democratic governance itself.

UNESCO's 2020 study found 73 percent of women journalists experienced online violence, with one in five facing offline attacks linked to online abuse. Despite the scale of the threat, ASEAN's cybersecurity frameworks remain largely gender blind. The ASEAN Digital Masterplan 2025 and Cybersecurity Cooperation Strategy emphasise infrastructure resilience and state protection but fail to recognise online harms as gendered threats to peace and security.

Here, GEWS can fill a critical gap. By using algorithms, social listening, and AI-assisted monitoring, ASEAN can detect early signals of online harassment campaigns, coordinated disinformation targeting women, or surges in misogynistic narratives. Such digital early warning indicators not only allow rapid response (e.g., take-downs, protective measures) but also provide empirical evidence to support survivor-centred legal and psychosocial interventions.

Importantly, digital GEWS bridge the divide between online and offline insecurities. Online abuse often escalates into physical harm, as seen in cases where women journalists or activists were attacked after online smear campaigns. Thus, monitoring online violence is not ancillary but central to preventing broader cycles of conflict and insecurity in the region.

5.1.3 Women's health crises as security challenges

The chapter on health security underscores that crises such as pandemics, disease outbreaks, natural disasters, and malnutrition are not merely medical phenomena but deeply political and security issues. COVID-19 vividly demonstrated this: lockdowns heightened domestic violence, frontline women health workers bore disproportionate risks, and health system breakdowns restricted access to maternal and reproductive care. Other crises, such as Zika and Malaria, showed how pregnant women faced heightened mortality and morbidity risks, often without adequate surveillance or data collection. These examples reveal a critical weakness in ASEAN's existing health security mechanisms: the absence of gender-disaggregated data and failure to anticipate women-specific vulnerabilities. Without gendered indicators, the early warning potential of disease surveillance systems remains stunted. For instance, the neglect of recording pregnancy status in Malaria surveillance across Cambodia, Myanmar, and Thailand exposed not just a public health gap but a gendered security blind spot.

Malnutrition similarly illustrates how structural inequalities reinforce cycles of vulnerability. Women not only experience the biological impacts of undernutrition and anaemia but also shoulder the social responsibility for household food security. When women's nutrition is compromised, intergenerational consequences follow, undermining social stability and economic growth.

The lesson is clear: health crises destabilise peace and security when women's vulnerabilities are ignored. By embedding gender-sensitive indicators into health EWS, tracking spikes in gender-based violence, maternal deaths, or disruptions in reproductive health services, ASEAN can ensure that women's insecurities become visible and actionable triggers for crisis response.

5.2 Complex emergencies and state fragility

Women's insecurity in fragile contexts is not only a consequence of fragility but also a predictor of instability. Empirical research demonstrates a strong correlation between gender inequality and the likelihood of conflict. It was found that higher levels of gender inequality correlate with

increased risks of internal conflict.²³³ And that the treatment of women is a better predictor of a state's peacefulness than other commonly used indicators, such as GDP or democratic governance.²³⁴ We have mentioned complex emergencies briefly throughout the report. It is important to point out that complex emergencies, where conflict, pandemics, and disasters converge, create layered insecurities. Women in displacement camps face heightened risks of GBV, reduced access to healthcare, and interrupted education. This connects directly to broader debates on state fragility. Fragility is multidimensional: it is reflected not only in conflict but also in failures of service delivery, governance, and inclusivity. GEWS can anticipate these risks, enable contingency planning and safeguard displaced populations. Women's experiences such as those discussed in this report; maternal mortality spikes, digital harassment, and malnutrition are all key indicators of fragility. By integrating GEWS into the WPS RPA, ASEAN can strengthen both state resilience and regional cohesion, ensuring that women's insecurities are treated as central security concerns rather than peripheral social issues.

State fragility or its effectiveness has profound gendered dimensions. Fragile states often lack the institutional capacity to uphold women's rights, provide health and education services equitably, or prevent gender-based violence. In such contexts, women's insecurity is both a symptom and a driver of fragility: rising maternal mortality, unaddressed digital and physical violence, and exclusion from governance are indicators of weak state legitimacy and social fractures.²³⁵ Moreover, ignoring women's specific vulnerabilities in fragile contexts not only undermines human security but perpetuates instability. Research demonstrates that societies with higher gender equality are stronger and less prone to conflict, making women's protection and participation central to addressing fragility.²³⁶

One way to address these challenges is to move away from siloed thinking and practice and make concerted efforts to coordinate across sectors. Efforts should be made to link health, digital, disaster, and peace/security mechanisms. For example, regional cooperation that leverages ASEAN frameworks—such as the WPS RPA, AADMER, and the ASEAN Digital Masterplan—to institutionalise GEWS. Complex emergencies and state fragility reveal the gendered patterns of insecurity that have long been neglected in conventional security studies.

²³³ Mary Caprioli, "Primed for Violence: The Role of Gender Inequality in Predicting Internal Conflict," *International Studies Quarterly* 49, no. 2 (2005): 161–178.

²³⁴ Hudson, Valerie M., Bonnie Ballif-Spanvill, Mary Caprioli, and Chad F. Emmett. *Sex and World Peace*. New York: Columbia University Press, 2012.

²³⁵ OECD (2022). *States of Fragility 2022*. Paris: OECD Publishing, 2022. <https://doi.org/10.1787/c7d968ae-en>; Jacqui True and Sarah Hewitt, "The Gendered Dimensions of State Fragility and Failure," in *The Palgrave Handbook of Gender and Development: Critical Engagements in Feminist Theory and Practice*, ed. Wendy Harcourt (London: Palgrave Macmillan, 2019), 660–673.

²³⁶ Caprioli, "Primed for Violence"; Hudson, Valerie *et. al.* *Sex and World Peace*.

Women and girls face disproportionate risks in health, safety, and digital spaces, yet they also hold critical knowledge and capacities for resilience. A gendered perspective reframes these vulnerabilities as warning signals of wider instability. By embedding GEWS in ASEAN's WPS RPA, the region can not only improve anticipatory action but also reaffirm its commitment to building a people-centred community.

5.3 Crisis situations and the secondary risk of human trafficking in Southeast Asia

Crisis situations in Southeast Asia, including natural disasters, internal conflicts, the COVID-19 pandemic, and the rapid growth of cyber-enabled crime also increase vulnerabilities that lead to human trafficking. The region's exposure to recurrent disasters, combined with displacement and fragile political and economic conditions, often creates circumstances in which trafficking and exploitation can thrive. Natural disasters such as typhoons and floods disrupt livelihoods and force communities to migrate, creating opportunities for traffickers to target those seeking work or relocation. Similarly, conflict and instability within states continue to push vulnerable populations into exploitative migration pathways.²³⁷

The COVID-19 pandemic revealed how crisis conditions exacerbate trafficking risks. Lockdowns, job losses, and mobility restrictions left millions of migrant workers stranded and desperate for income, making them susceptible to fraudulent recruitment and forced labour schemes.²³⁸ The International Organization for Migration (IOM) documented how trafficking networks increasingly exploit such crises, using online platforms to deceive victims into digital scam operations and forced criminality.²³⁹ Interpol described the proliferation of trafficking-linked "scam compounds" in Southeast Asia as a "global crisis," with thousands of victims coerced under threats of violence and debt bondage.²⁴⁰ UN human rights experts have called for urgent action to address these emerging forms of trafficking, emphasising that forced criminality represents a new and under-recognised dimension of exploitation linked to crisis-induced vulnerabilities.²⁴¹

These developments reveal an important policy gap within the ASEAN WPS RPA. While the RPA emphasises the protection of women in conflict and humanitarian settings, it does not

²³⁷ U.S Committee for Refugees and Immigrants. 2025. At Risk Twice Over: Displacement and Human Trafficking in Southeast Asia, <https://sway.cloud.microsoft/QDBSeDhyRUATZXVH?ref=email>.

²³⁸ Generation of Rights Over the World. 2024. Human Trafficking in Asia: A Hidden Scourge, <https://www.growthinktank.org/en/human-trafficking-in-asia-a-hidden-scourge>.

²³⁹ International Organization for Migration Thailand. 2023. Forced into Crime: Trafficking Survivors in Thailand Tell Their Stories, IOM Thailand, <https://thailand.iom.int/stories/forced-crime-trafficking-survivors-thailand-tell-their-stories>.

²⁴⁰ Interpol. 2025. INTERPOL releases new information on globalization of scam centres, <https://www.interpol.int/News-and-Events/News/2025/INTERPOL-releases-new-information-on-globalization-of-scam-centres#:~:text=Global%20crisis,scam%20centre%20in%20the%20Philippines>.

²⁴¹ Office of the United Nations High Commissioner for Human Rights. 2025. UN experts urge immediate human rights-based action to tackle forced criminality in Southeast Asia scam centres, <https://www.ohchr.org/en/press-releases/2025/05/un-experts-urge-immediate-human-rights-based-action-tackle-forced>.

systematically address, apart from brief mentions, trafficking as a secondary consequence of crises. Integrating this dimension into the ASEAN WPS agenda would reinforce the RPA's preventive and protection pillars and advance ASEAN's broader commitment to human security and regional stability. Vulnerabilities relating to human trafficking should be recognised as part of the violence and insecurity that disproportionately affects women and girls before, during, and after crises.

The development of gendered EWS is an important entry point for integrating the concerns of human trafficking into the ASEAN WPS agenda. Existing EWS mechanisms in the region focus primarily on monitoring conflict escalation, disaster risks, and humanitarian displacement. However, few are designed to detect indicators of human exploitation. Expanding these systems to incorporate socio-economic and behavioural data such as spikes in unemployment, irregular border crossings, online recruitment scams, or missing persons reports would allow for more proactive identification of trafficking risks.²⁴² Having these indicators within ASEAN's EWS frameworks would also promote coordination between WPS, counter-trafficking and crisis management mechanisms.

Recognising trafficking as a peace and security issue would strengthen the preventive and protection scope of the WPS RPA and enhance resilience across crisis-affected communities. A holistic, gender-sensitive approach that links trafficking prevention with crisis preparedness and response will ensure that women's safety, dignity, and agency remain central to ASEAN's peace and security architecture.

5.4 The RPA – a way to operationalise and commit to GEWS

Embedding GEWS into the WPS RPA allows ASEAN to operationalise the core commitment and intention of the WPS agenda in Southeast Asia, implementing the agenda as an “essential part of achieving sustainable peace and prosperity in the ASEAN region.”²⁴³ By systematically collecting sex-disaggregated data, engaging women's groups in local monitoring, and linking early signals to regional responses in health, digital security, and cybersecurity as well as in (natural) disaster management, ASEAN can strengthen both state effectiveness and regional cohesion. However, for this to happen GEWS must be embedded in ASEAN's formal mechanisms and not treated as ‘pilot’ projects of NGOs or international organisations. This

²⁴² Geneva Centre for Security Sector Governance (DCAF). 2018. Trafficking along Migration Routes to Europe: Bridging the Gap between Migration, Asylum and Anti-Trafficking, <https://www.dcaf.ch/sites/default/files/publications/documents/Trafficking%2520Complete.pdf>.

²⁴³ ASEAN (2022). *ASEAN Regional Plan of Action on Women, Peace and Security*: p4

includes explicit integration into the WPS RPA's prevention, protection, and participation and relief and recovery matrices. The points below sum up, broadly, what this would entail.

- For data systems: sex- and age-disaggregated data must be systematically collected across health, digital, and security sectors. Proxy indicators—such as spikes in domestic violence reports or misogynistic hashtags—must be recognised as legitimate security signals.
- For community participation: women's groups, health workers, and digital rights advocates must be institutionalised as first-line sensors/operators in EWS. Their participation ensures both contextual relevance and legitimacy.
- For cross-sectoral coordination: GEWS must bridge health, digital, and conflict prevention systems. Siloed approaches weaken resilience; integrated frameworks enhance it.
- For funding and capacity-building: ASEAN must dedicate pooled funds to GEWS development and provide training for policymakers, law enforcement, and civil society actors.
- For rights-based safeguards: monitoring must uphold privacy, consent, and survivor-centred approaches, preventing misuse against activists or marginalised groups.

The overarching conclusion is that gendered insecurities are not peripheral but central to ASEAN's stability. Women's health crises, digital insecurity, and gender-based violence are not merely 'women's issues', often considered a 'luxury' issue when faced with multiple crises, which can be addressed at a later stage. A gendered perspective can make urgent rebuilding work more effective and help seize windows of opportunity during crises.²⁴⁴ Truth is, gendered insecurities stand as indicators of systemic state fragility that can escalate into broader conflict and instability.

By adopting GEWS across health, digital, and humanitarian domains, ASEAN can move closer to its Vision 2045 of a people-centred, inclusive, and resilient community. GEWS provide not just technical tools but political leverage, transforming women's lived experiences into recognised indicators of peace and security.

5.5 ASEAN's strategic position

ASEAN is uniquely placed to integrate GEWS into its WPS RPA. Embedding GEWS into ASEAN's institutional architecture, across disaster management, digital governance, health

²⁴⁴ Martin-Shields, Charles and Diana Koester (2024). *State Fragility and Development Co-operation*.

security, and humanitarian response, will strengthen the region's and member states' legitimacy, resilience, and leadership. ASEAN's Vision 2045 of a people-centred, inclusive community cannot be achieved without addressing the differentiated insecurities faced by women. By institutionalising GEWS, ASEAN can position itself as a global leader in inclusive security governance, linking the WPS agenda to human security and sustainable peace. The pathway to ASEAN Vision 2045 must be built on mechanisms that capture and respond to the realities of women's lives.

By embedding GEWS, ASEAN can ensure that women are recognised not only as a vulnerable group but as agents of strength and capacity. The WPS RPA provides a robust normative framework, yet the gap between commitments and practice persists. The absence of explicit mechanisms and resources to operationalise GEWS weakens implementation. The region's vision of a people-centred, inclusive community depends on acknowledging and addressing women's differentiated insecurities. At present, the RPA lacks explicit mechanisms, resources, and accountability to operationalise GEWS across disaster management, digital governance, health security, and complex emergencies. Closing this gap will strengthen ASEAN's legitimacy, and capacity to lead globally on inclusive security practices. Integrating GEWS into ASEAN's institutional architecture transforms women from passive recipients of aid to active participants in shaping security futures. This prepares the region to navigate uncertainties while remaining anchored in inclusive values.

5.6 Final reflections

The integration of GEWS into ASEAN's WPS RPA is more than a policy adjustment; it is a paradigm shift. It reframes what counts as 'security', who gets to define risks, and how responsiveness, endurance and preparedness are built. By centring women's vulnerabilities and contributions, GEWS bridge the gap between normative commitments and practical action. Greater number of women's lives lost and their disproportionate suffering in natural disasters highlight the possible ineffectiveness and gaps in disaster management strategies. Digital ecosystems show us that women's voices are frontline sites of contestation. Health crises remind us that women's bodies are frontline sites of insecurity. Together, they reveal that without gender-sensitive monitoring and anticipatory action, ASEAN's stability remains precarious.

The task ahead is demanding but clear: ASEAN must institutionalise GEWS, allocate resources, and foster partnerships that span governments, civil society, and the private sector.

In doing so, the region not only strengthens women's security but also reinforces its own legitimacy, resilience, and leadership in global peace and security frameworks.

This report underscores the critical importance of gender-responsive early warning systems. A logical next step would be a systematic assessment of existing EWS/GEWS practices and their effectiveness. Equally important is the need to examine:

1. the articulation of political will and allocation of resources required to embed GEWS;
2. the incentives and motivations for developing gender-responsive, cross-sectoral coordination across different security architectures in the region;
3. the imperative to establish regional data governance frameworks to standardise privacy, protection, validation, and related protocols; and
4. the current and potential future trajectories of public-private partnerships in this domain.
5. The secondary effects of multiple crises on women and girls, such as the threat of human trafficking.

Each of these dimensions will significantly shape the implementation and impact of GEWS in the region. The authors therefore identify them as key priorities and leave them open for a future research agenda.

5.7 Policy Recommendations

The recommendations below are extracted from discussions in this report and the closed-door workshop. We have reorganised and summarised them here thematically, highlighting those that are crosscutting.

Cross-cutting themes

Regional/ National level

- Ensure political will and resources to embed GEWS into ASEAN frameworks.
- Establish data governance principles (privacy, protection, disaggregation standards, validation).
- Develop a cross-sector coordination model involving state, CSOs, and private/tech providers, including sustainable funding mechanisms.
- Mainstream gender perspectives at every stage of early warning design and implementation - Create inter-operable governance standards to reduce platform siloes and enable selective, safe data exchange.
- Invest in sex-, age-, and disability-disaggregated data collection and analysis.
- Support local-level monitoring mechanisms with strong community engagement.
- Clarify data collection tool approach: incorporate gender-lens into existing systems for a more inclusive approach and avoid tool proliferation.
- Enhance national databases:
 - Maintain gender-disaggregated data at national levels due to context specificity and retain specific cultural/religious data (for example to include hijabs, prayer mats etc in hygiene kits for women in culturally sensitive areas).
 - Also to include women's life-stage data (for example to include supplements for pregnant women)

Local level

- Build inclusive participation by engaging women-led CSOs, grassroots networks, and local leaders - Identify and empower community champions to drive greater integration.
- Design community-centred implementation pilots that embed women's participation by design and include childcare/support measures.

Sectoral recommendations

Climate security and natural disasters

- Guarantee women's representation in disaster management committees.
- Use diverse communication platforms, including women-led networks, to disseminate warnings.
- Establish gender-sensitive shelters with maternal kits, privacy, and protection protocols.
- Collect data on gendered disaster impacts to inform inclusive recovery.

Digital security

- Integrate online GBV prevention into ASEAN's cybersecurity strategies.
- Recognise the differentiated risks women face in digital spaces.
- Support women activists, journalists, and leaders in safe online participation.
- Build a regional database on online harassment and digital exclusion.

Health security

- Mainstream gender into health crisis planning and policy.
- Address caregiving burdens by providing social and economic support for women.
- Train healthcare providers in gender-sensitive, culturally responsive care.
- Recognise women as key health actors, not only as vulnerable groups.

Complex emergencies

- Identify layered vulnerabilities in contexts of overlapping crises.
- Develop GEWS to track GBV risks, displacement trends, and healthcare access.
- Ensure women's participation in humanitarian planning and recovery processes.

Annexe I: Workshop Notes

RSIS Closed-Door Reviewers' Workshop *Early Warning Systems* *in the ASEAN Women, Peace and Security Regional Plan of Action: Potential (and Pitfalls) in preventing GBV* 8 October 2025



As part of the process to ensure rigour in research and writing, a group of five experts from the region were invited to review the report: *Ahead of Harm: Integrating Gendered Early Warning into ASEAN's WPS Regional Plan of Action*. The final draft report was sent to them, and they were required to share their comments in a closed-door workshop in RSIS.

The following experts were invited to participate in the roundtable:

1. Ms Ana Paula Da Costa Xavier (on women and climate security)
CEO, Simile
Timor-Leste
2. Col. Francel Margareth Padilla Taborlupa (on women and digital security-institutional)
Armed Forces of the Philippines
3. Dr Delsy Ronnie (on women and digital security-community)
Head of Mission
Philippines and Regional Representative for Asia Non-Violent Peace Force
4. Dr Gabriela Fernando (on women's health security)
Assistant Professor (Global Health)
Monash University Indonesia
5. Ms Victoria Leat (WPS and EWS in ASEAN)
Asia Program Advisor
Pacific Disaster Centre
Bangkok, Thailand

The experts participated in a full-day workshop, where they gave short presentations on their work and its connection to WPS/GEWS. The afternoon session was devoted to discussing the report in greater detail. Participants were divided into two groups and given a set of questions to answer. Their responses are outlined below. As the workshop was conducted under the Chatham House Rule, comments are not attributed to any person/institution. In addition to the participants above, colleagues from RSIS, namely from the Humanitarian and Disaster Response (HADR) Research Programme and the Centre in Excellence in National Security, participated in the workshop as well. Key points and recommendations highlighted in the workshop discussion session have been incorporated into the main report. The notes presented here can also be considered areas for future research in examining GEWS in the WPS RPA.



Discussion Session

During the workshop, both groups discussed the feasibility and implementation considerations of gendered early warning systems (GEWS) within ASEAN contexts. They focused on its value for state effectiveness, key limitations, applicability to regional crisis preparedness architectures, and avenues for practical implementation. There was emphasis placed on data governance, cultural sensitivity, community-centric models, and cross-sector coordination to ensure gender-responsive outcomes.

The key questions in figure I, facilitated the workshop discussion session.

1. To what extent can gendered EWS be considered a valid tool to measure and evaluate state effectiveness?
2. What are some important limitations to consider in using GEWS in the WPS RPA as a data gathering tool in ASEAN?
3. In what ways could data acquired from GEWS be used to evaluate the current regional architecture for crisis preparedness and management?
4. In your opinion, what are other practical ways of implementing GEWS in the WPS RPA?

Figure I: Guiding Questions

The responses are presented below.

Question 1: To what extent can gendered EWS be considered a valid tool to measure and evaluate state effectiveness in ASEAN?

- GEWS provides nuanced, context-specific insights into the needs of women and vulnerable populations.
- GEWS should be considered as a guiding document enhanced by sectoral plans of action rather than a stand-alone tool.
- It supports more targeted policy and operational decisions at national and sub-national levels.
- GEWS needs to be align with the ASEAN Vision 2035 and the WPS regional frameworks while enabling WPS National Action Plans.
- GEWS can leverage on existing indicators and tools with a gender lens instead of creating new instruments – there should be enhancements to current early warning and disaster management tools, ensuring they do not perpetuate gender biases.

Question 2: What are some limitations to consider in using GEWS in the WPS RPA as a data gathering tool in ASEAN?

- *There are challenges in collecting updated data.*
 - There is uneven availability, quality, access, and disaggregation of data across member states (e.g., village-level data in some, limited in others).
 - There are also data protection risks: Identifying vulnerable groups may expose them to harm.
 - Governance and sharing of data in the region is poor.
 - Proliferation of siloed platforms.
 - Reluctance to share; and
 - Heavy reliance on self-reporting undermines validity.

- *There are significant capacity disparities in the region.*
 - Wide differences among member states (e.g., Singapore vs. Lao PDR) in indicator availability, institutional capacity, and granularity.
- *Cultural sensitivity can hamper even the most well-planned activities.*
 - Aid and relief must respect and be aware of local norms (e.g., certain sanitary product provisions (tampons) in Myanmar is considered culturally inappropriate). Personnel collecting data must be cognisant of such sensitivities.
 - There needs to be an awareness of thresholds: differing definitions of crisis across countries complicate standardised triggers.
- *Advantages and incentives in using GEWS*
 - There needs to be champions within sectors to drive the adoption of GEWS and to articulate tangible rewards and value for implementers.
- *There might be an overburdening of women.*
 - Participation and representation alone can impose undue workloads on women at local levels, given the time they must allocate to attend meetings translates to time away from domestic/care duties.
 - To encourage greater participation, ground-level support is needed (e.g., childcare during consultations).
 - Engage men as allies and trusted gatekeepers (religious/community leaders) to share responsibility and build acceptance.

Question 3: In what ways could data from GEWS be used to evaluate the current regional architecture for crisis preparedness and management?

- *Connecting GEWS data to ASEAN's regional crisis preparedness.*
 - Currently there are gaps in linking community-level gender data to regional structures. There needs to be clearer pathways and accountability.

- Consider an ASEAN-wide workplan with country-led responsibilities per sector (e.g., Singapore could lead in digital security, Indonesia in CVE etc.)
- *Bottom-up community integration.*
 - Community-driven monitoring yields stronger resonance, sustained maintenance, and political pressure for state to adopt GEWS.
 - By design, community-centred approaches elevate women's voices and integrate needs from the outset.
- *Operational insight of ASEAN's current regional architecture for crisis preparedness and management.*
 - ASEAN DELSA²⁴⁵ hygiene kits currently overlook disproportionate needs of women; redesign with gender-responsive contents.
- *GEWS could provide information on evacuation and movement indicators.*
 - Case study: Myanmar community practices during crises include:
 - Locally organised "safe routes" planning via churches and community structures.
 - Seasonal risk awareness (e.g., dry-season air attacks); landmine-risk education; host-community coordination.
 - Rules to reduce tensions (sleep in host homes; cleaning/washing at churches).
 - Temporary learning centres to prevent child vulnerability; first-responder training for GBV/atrocity recognition and reporting pathways.
 - Tactical engagement (e.g., short unilateral ceasefires through local leaders during holidays) to enable safe movement.
 - Structured movement plans (batch sizes, sequencing, time windows) to complete evacuations efficiently and safely.

²⁴⁵ DELSA or Disaster Emergency Logistics System for ASEAN is a key mechanism to allow for swift provision of relief items to ASEAN Member States facing post-disaster emergency situations. – AHA Centre. 'Resource Management'. ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management, 2025. <https://ahacentre.org/resource-management-1/>

Question 4: In your opinion, what are other practical ways of implementing GEWS in the WPS RPA?

- *Roles and interactions*
 - Define complementary responsibilities across state, civil society, and private sector, emphasising joint planning and inter-operable procedures.
 - Incorporate platform providers/tech companies for digital security and data infrastructure.
- *Public–private–civil cooperation*
 - Model after ASEAN partnerships where NGOs support implementation of GEWS work plans.
 - Explore enterprise models (private sector versions) to subsidise community systems while maintaining equitable access and sustainability.
- *National agency alignment*
 - Responsible agencies differ (e.g., civil defence vs. social development ministries); many do not use WPS language but have parallel legal frameworks.
 - Encourage cross-sectoral conversations and data flows within states to overcome fragmentation.

About the Authors



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