Mainstreaming Gender: An Examination of Gender Equality in Global Environmental Governance

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Abstract

Gender equality has been a topic that has garnered increased attention in the international environmental governance sphere. Gender equality goals have many cross-cutting links with sustainable development goals such as human rights issues, control and access to resources, peace and security, and environmental health. This MSc thesis focuses on the intersection of gender equality issues and environmental governance specifically examining chemicals and waste international agreements. From an environmental justice and intersectional lens, the study investigates nine selected Multilateral Environmental Agreements (MEAs) to examine how gender equality aspects have been included. Drawing comparisons from areas such as climate change and biodiversity where gender equality linkages have been somewhat explored and documented, this study centers around the chemicals and waste sector where gender mainstreaming has yet to be fully integrated into international agreements. The study begins by addressing the terminology used in treaty texts and how word choices can lead to various interpretations. It then highlights major activities and themes from the MEA gender action plans. Finally, the study concludes by uncovering the challenges and barriers faced by the MEA secretariats and recommends opportunities for gender mainstreaming going forward. Empirical data was collected from online sources through a literature review as well as semi-structured interviews with six MEA secretariats. The data was analyzed using a qualitative content analysis method in conjunction with NVivo software. Findings from this study highlighted a series of major challenges and barriers to gender mainstreaming implementation some of which included: funding and resources, lack of available sex-disaggregated data, stakeholder collaboration challenges, and communication and awareness issues. Major recommendations include integrating a gender perspective in the treaty texts, actionable and measurable gender mainstreaming strategies in MEA gender action plans, and suggested focus areas for future research on this subject matter.

Keywords: Gender equality, environmental governance, multilateral environmental agreement, gender mainstreaming, intersectionality, environmental policy

Executive Summary

In recent decades, gender equality has been a crucial link to sustainable development issues and has been gaining traction in the global environmental governance sphere. Government legislation has been traditionally viewed as "gender-neutral and value-free instruments, on the assumption that the formulation and administration of public policy benefits all members of the public equally" (European Institute for Gender Equality, 2016, p.9). However, whether unintentionally or not, policies may often impact men and women differently, which can reinforce societal gender inequalities (European Institute for Gender Equality, 2016). There are systemic challenges as well as practical challenges which limit gender equality from being achieved in the environmental governance arena. Systemic challenges can include occupational stereotyping, gender norms, lack of women's decision-making powers in the workplace and unions, lack of policies regulating gender equality and equal access, and general lack of understanding of the complexities of the gender dimension (MSP Institute, 2019). Practical challenges can include the overall lack of sex-disaggregated data (scientific data studying the differentiated experiences and situations of men and women), lack of gender-diverse people's representation in studies, lack of physiological and toxicological data around chemical exposure, and lack of communication and awareness around the gender perspective within environmental issues. (ILO 2013; MSP Institute, 2019).

Measures to increase gender equality in environmental protection policies have been progressively recognized on an international scale. Various international mandates have instructed United Nations (UN) member states to include and integrate gender into their environmental management practices. One significant environmental governance tool is the Multilateral Environmental Agreement (hereafter MEA), which often address global environmental challenges such as climate change, chemical pollution, biological diversity, amongst many others. These include conventions, protocols, or agreements between many countries that agree to take action on a pressing environmental issue. Many of the MEAs are not new; however, only a few of them mention women in the treaty texts.

The **research aim** of this project was to gain an exploratory perspective on gender equality aspects in MEAs and how advancing gender equality goals can be mainstreamed in the UN political and administrative system. To do this, an examination of the characteristics and concrete processes of MEAs which incorporate a gender equality aspect was conducted. The study focused on nine different MEAs with a focus on chemicals and waste related agreements; however, also included two ozone depletion agreements, one biodiversity convention, and one climate change convention.

The MEAs of focus in this study were:

- United Nations Convention on Biological Diversity
- United Nations Framework Convention on Climate Change
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- Stockholm Convention on Persistent Organic Pollutants
- Minamata Convention on Mercury
- Strategic Approach to International Chemicals Management
- Vienna Convention for the Protection of the Ozone Layer
- Montreal Protocol on Substances that Deplete the Ozone Layer

An online review suggests that there is a substantial number of publications regarding gender equality and MEAs from a variety of stakeholders such as Non-Governmental Organizations, policymakers, and academia. However, a research gap was suggested by practitioners working on this issue regarding the integration of gender equality aspects in the MEA processes, specifically from the MEA secretariat (or governing body) point of view. The secretariat's role is primarily to assist parties (countries who have agreed to the legal obligations of the MEA) in planning and implementation of the agreement. This thesis focused on international policies in recognition of the large impact that global environmental agreements have on national governments and the great potential for positive change. The researcher also acknowledges the impact that national and local policies have on environmental protections and increasing gender equality; however, this angle was not in the scope of the thesis.

Overall, this research strives to contribute to the conversation of increasing gender equality in MEAs and opportunities to increase gender mainstreaming in the UN system. Therefore, the following research questions addressed in this project are as follows:

RQ1: What type of language is used in the texts of selected MEAs in relation to gender mainstreaming?

RQ2: What are the major activities and themes of the MEA gender action plans?

RQ3: What challenges and barriers have MEA Secretariats faced when including gender mainstreaming in the MEA planning and implementation process?

The research design followed a qualitative approach where data was collected from existing online sources as well as semi-structured interviews. To answer the proposed research questions, this thesis used a two-pronged approach: an online literature review and stakeholder interviews. The literature review was used to examine MEAs in which gender is mentioned in the text and delineate the type of obligations which ratifying parties face with specific attention paid to the terminology used. The literature review utilized various sources such as academic articles, books, UN publications, and non-governmental/intergovernmental publications to gain a high-level view of the issue and research area. Additionally, grey literature, webinars, and an online course were used as a triangulation of data collection from various media. To gain an in-depth view of how different stakeholders are working on gender equality efforts in the global environmental governance sphere, informal semi-structured interviews were conducted with people working in non-governmental organizations, academia, within the UN system, intergovernmental agency, and a national environmental ministry. These informal interviews helped to narrow down the focus from the larger gender equality and international environmental governance sphere to a focus on MEA secretariats. The main source of empirical data in addition to the literature review were semi-structured interviews with secretariats of MEAs to gain a detailed perspective from the practitioners who had direct experience working on gender mainstreaming efforts within the agreements. Data was then analyzed using the qualitative content analysis method using NVivo coding software.

Significant **findings** and recommendations going forward are as follows: The first **research question** examining the language and terminology used in MEAs around gender found that women were referenced in the treaty texts sparingly. However, the number of UN publications on the MEA database website has substantially increased. In only a four-month span of writing this thesis, the number of publications had increased from 271 to almost 500. This shows that gender equality was not a high priority issue when the treaties were drafted, but it is a topic that has garnered much attention in recent years. In examining the treaty texts, women were often mentioned as part of a list – mostly included in vulnerable populations amongst workers,

children, the elderly, etc. This portrayed women as part of a community that needs protection, rather than agents of change. One unique finding of the terminology assessment was the inclusion of the Strategic Approach to International Chemicals Management global framework. This framework included many action-oriented references around gender and women, but it is important to note that this is a non-binding framework which makes it unique from the other eight agreements reviewed. When considering all of the MEAs combined, slippery negotiation terms (such as 'urges' or 'should') and hortatory language (for instance 'acknowledging') should be excluded wherever possible in order to avoid subjective interpretation by parties and promote concrete actions. Overall, the inclusion of a gender perspective in the text of the MEA is a highly beneficial attribute to incorporate from the start, as it sets a precedent for future gender mainstreaming work.

The **second research question** addressing the major activities and themes of gender action plans was a study of four different gender action plans. Two chemicals and waste MEAs (one of which was in draft form to be considered by the governing body), one biodiversity, and one climate change agreement. The biodiversity plan had by far the most in-depth action and implementation items and the chemicals cluster had the least number of references, but the most detailed accountability action items planned. The top five most referenced activities were: (1) communication and awareness, (2) stakeholder collaboration, (3) baseline and reporting progress, (4) implementation, and (5) linkages to social and environmental issues. Whereas the least discussed were funding and resources, UN system collaboration, gender team within the secretariat, and last was updateability of the plan.

Recommendations for gender action plans (updates of current plans or future MEA gender action plans) can include incorporating accountability measures and funding requirements. Specifying targets and intended results for action items. Reporting on the effectiveness of the gender action plans to increase accountability and transparency. An increased level of detail around how often the plan will be updated should be included in future plans. Increasing communication and awareness with stakeholders and the general public about the interconnections of the MEA issue and gender equality would be beneficial going forward. Visibility of gender aspects on some of the secretariat webpages was found to be sufficient but could be increased in others.

The third research question uncovered challenges and barriers that MEA Secretariats faced when including gender mainstreaming in the planning and implementation process. Significant findings consisted of funding and resources constraints and challenges around the implementation of the gender action plan. Areas of opportunity that came up were stakeholder collaboration and the benefits of working with other actors in the women and environment nexus. In the chemicals and waste related MEAs, there was a significant connection to women and chemical exposure which made the linkages between gender and environment clear. In contrast, it was found that stakeholders coming from a natural science background did not always have a direct gender connection, therefore the connection was more difficult at times. The COVID-19 global pandemic presented to be a challenge in various ways from meeting postponement to a disruption of the multilateralism process overall. While there are various challenges that the MEA secretariats encounter, there are clear motivations to include a gender perspective in the work going forward.

Contributions of this thesis resulted in recommendations of common elements MEAs should be addressing around gender equality and potential ways to enhance gender mainstreaming in international environmental agreements. Some of which include: (1) introducing gender mainstreaming goals in the beginning development of MEAs rather than including it as an add-on element later in the process, (2) secure adequate funding and resources to continue gender

mainstreaming work, (3) each MEA secretariat should have at least one gender expert assisting parties and stakeholders outside of the secretariat, and (4) increasing collaboration within the UN, specifically with UN Women, in order to avoid duplication of efforts and mainstream gender throughout the MEAs. Some MEA secretariats are in the process of drafting a gender action plan or updating the existing plan, therefore this research was timely in providing recommendations for best practices to increase gender mainstreaming efforts.

In **conclusion**, this research project completed an in-depth examination of gender equality in global environmental governance, specifically with a focus on MEAs. Terminology around gender and women were discussed, gender action plan activities and themes were delineated, and challenges faced by MEA secretariats were uncovered in the interview process. Opportunities for improvement of gender mainstreaming efforts within the MEA system were suggested and future research angles were identified. Overall, gender mainstreaming work is ramping up in the chemicals and waste related MEAs. Crucial lessons have been learned from integrating a gender lens in other environmental agreements and this important work continues to move the needle towards a more sustainable and just future.

Table of Contents

A	CKNOWL	EDGEMENTS]
A	BSTRACT		I
E	XECUTIV	'E SUMMARY	II
L	IST OF FI	GURES	VII
		ABLES	
		TIONS	
1		DDUCTION	
	1.1 BAG	KGROUND	
	1.1.1	Gender Dimension	2
	1.1.2	Intersectionality	
	1.1.3	Sustainable Development Agenda	
	1.1.4	A Focus on Chemicals	
	1.2 PRC	BLEM DEFINITION	
	1.2.1	International Policy Lens	
	1.2.2	Current Knowledge and Entry Points	
		AND RESEARCH QUESTIONS	
		ERVIEW OF METHODOLOGIES	
		PE	
		ITATIONS	
		IICAL CONSIDERATIONS	
		DIENCE	
	1.9 DIS	POSITION	12
2	LITER	ATURE REVIEW	
	2.1 GEN	NDER CONCEPTUALIZATIONS	13
	2.1.1	Equality or Equity?	14
	2.1.2	Gender Mainstreaming	14
	2.2 Gen	NDER DIMENSIONS IN ENVIRONMENTAL POLICY	
	2.2.1	Feminism Theory and Intersectionality	10
		TING THE SCENE: BACKGROUND ON MEAS	
	2.3.1	Legal Nature of MEAS	18
	2.3.2	Hard Law and Soft Law	19
	2.3.3	Institutionalized or Fragmented?	
	2.3.4	Role of the Secretariat and MEA Synergies	
	2.3.5	Terminology Specifications	
	2.4 STA	TUS OF GENDER AND MEAS	
	2.4.1	MEAs and Gendered Language	
	2.4.2	Challenges and Barriers to Addressing Gender in the MEAs	
	2.5 Liti	ERATURE REVIEW CONCLUSION	27
3	METH	IODOLOGY	28
	3.1 Res	EARCH DESIGN	28
		TA COLLECTION	
	3.2.1	Literature Review	
	3.2.2	Informal Talks with Stakeholder Perspectives, Online Courses, and Webinars	
	3.3 DA	TA ANALYSIS	
	3.3.1	Content Analysis with NV ivo	37
4	RECIII	_TS	26
•	TAL OUT	J ₹ ♥	J(

	4.1 MEA TEXT LANGUAGE ASSESSMENT RESULTS	38
	4.1.1 Gender Terms in MEA Texts	38
	4.1.2 Gender Template Screening	
	4.2 GENDER ACTION PLAN ASSESSMENT RESULTS	
	4.2.1 Gender Action Plan Findings	
	4.3 SECRETARIAT INTERVIEW RESULTS	
	4.3.1 Major Interview Findings and Analysis	
	4.3.2 Unique Findings & Conclusions of Secretariat Interviews	
5	DISCUSSION AND ANALYSIS	57
	5.1 SIGNIFICANT FINDINGS	57
	5.1.1 MEA Gender Screening Template Analysis	57
	5.1.2 Gender Action Plan Analysis	
	5.1.3 Significant Findings from Secretariat Interviews	
	5.2 METHODOLOGY AND LIMITATIONS	63
6	CONCLUSIONS	65
	6.1 RECOMMENDATIONS FOR FUTURE RESEARCH	69
В	BIBLIOGRAPHY	71
A	APPENDIX A	79
A	APPENDIX B	80
A	APPENDIX C	81
A	APPENDIX D	82
••		
L	List of Figures Figure 3-1. Research Steps to Addressing the Research Questions Source: Aut	
L		29 tion texts
L F	Figure 3-1. Research Steps to Addressing the Research Questions Source: Autoreation	29 tion texts40 hor's own
L F	Figure 3-1. Research Steps to Addressing the Research Questions Source: Autoreation. Figure 4-1. Gender screening template codes found across nine convention examined. Source: Author's own creation. Figure 4-2. Bar Graph Analysis of Gender Action Plan Findings Source: Author	29 tion texts40 hor's own44 hor's own
L F F	Figure 3-1. Research Steps to Addressing the Research Questions Source: Autoreation. Figure 4-1. Gender screening template codes found across nine convene examined. Source: Author's own creation. Figure 4-2. Bar Graph Analysis of Gender Action Plan Findings Source: Autoreation. Figure 4-3 Total Coding References Across Gender Action Plans Source: Autoreation.	29 tion texts40 hor's own44 hor's own45 :: Author's
	Figure 3-1. Research Steps to Addressing the Research Questions Source: Aut creation. Figure 4-1. Gender screening template codes found across nine convenexamined. Source: Author's own creation. Figure 4-2. Bar Graph Analysis of Gender Action Plan Findings Source: Aut creation. Figure 4-3 Total Coding References Across Gender Action Plans Source: Aut creation. Figure 4-4. Bar Graph Analysis of MEA Secretariat Interview Findings Source own creation. List of Tables Fable 1-1 Details of the agreements on which this research focused on.	29 tion texts40 hor's own45 :: Author's50
L F F F F	Figure 3-1. Research Steps to Addressing the Research Questions Source: Aut creation. Figure 4-1. Gender screening template codes found across nine convenexamined. Source: Author's own creation. Figure 4-2. Bar Graph Analysis of Gender Action Plan Findings Source: Authorizeration. Figure 4-3 Total Coding References Across Gender Action Plans Source: Authorizeration. Figure 4-4. Bar Graph Analysis of MEA Secretariat Interview Findings Source own creation. List of Tables Fable 1-1 Details of the agreements on which this research focused on. Fable 2-1. Examples of gender dimensions and description of gender-specific applications.	
LF F F F	Figure 3-1. Research Steps to Addressing the Research Questions Source: Aut creation. Figure 4-1. Gender screening template codes found across nine convenexamined. Source: Author's own creation. Figure 4-2. Bar Graph Analysis of Gender Action Plan Findings Source: Authoreaction. Figure 4-3 Total Coding References Across Gender Action Plans Source: Authoreaction. Figure 4-4. Bar Graph Analysis of MEA Secretariat Interview Findings Source own creation. List of Tables Fable 1-1 Details of the agreements on which this research focused on. Fable 2-1. Examples of gender dimensions and description of gender-specific approach in the second content of gender-specific approach in the second	

Table 2-4. Organizational and programmatic challenges regarding gender mainstreaming in MEAs
Table 3-1. Results for 'gender' in the InforMEA database under Treaties category (1995-2019) including treaty text, related decisions, publications and resources (as of April 29, 2021).
Table 3-2. International environmental agreements selected for gender mentions31
Table 3-3. MEAs and their gender action plans
Table 3-4. Major themes and activities found from the gender action plan analysis 33
Table 4-1. Search results for the terms: 'gender', 'women', 'woman', 'men', 'man' in all MEA texts
Table 4-2. Coding journal of major activities/themes found in gender action plans 42
Abbreviations
BRS – Basel, Rotterdam, and Stockholm Conventions
CBD – Convention on Biological Diversity
COP – Conference of the Parties
COVID-19 – Coronavirus Disease 2019
GAD – Gender and Development
GDP – Global Domestic Product
GM – Gender mainstreaming
ILO - International Labour Organization
IUCN - International Union for Conservation of Nature
LGBTQIA+ - those who identify as lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and + symbolizing a number of additional sexual orientations and gender identities
MEA – Multilateral Environmental Agreement
NGO – Non-governmental Organization
POPs – Persistent Organic Pollutants
QCA – Qualitative Content Analysis
SDGs – Sustainable Development Goals
UN – United Nations
UNDP - United Nations Development Programme
UNEP - United Nations Environment Programme
UNFCCC - United Nations Framework Convention on Climate Change
UN-SWAP – United Nations System-wide Action Plan
WID – Women in Development

1 Introduction

Environmental justice, gender equality, and toxic chemical exposure have various interconnections. This research seeks to explore those interrelationships through an environmental governance lens. Environmental justice aims to ensure that all people, regardless of race, age, gender, social class, or other aspects have the right to adequate protection from environmental risks. However, it is increasingly recognized that low-income and minority communities have faced disproportionate environmental threats over the past several decades (Coolsaet, 2020; Raven et al., 2019). For example, low-income communities may have less access to parks, green spaces, clean air, and healthy food. Moreover, these same communities often have less participation in decision-making and planning around where landfills, industrial factories, and major transportations routes such as highways are located (Raven et al., 2019). This may lead to a multitude of environmental impacts such as polluted air, soil, and waterways, leading directly to adverse health impacts. In addition, low-income communities often have less access to education and quality healthcare (Raven et al., 2019). The downstream consequences relating to these complex issues may result in detrimental outcomes on the lives of not only current generations but also those of future generations. The Brundtland report published by the World Commission on Environment and Development in 1987 (often referred to as "Our Common Future") described sustainable development as "economic development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). This landmark definition of sustainable development underscores the interconnections between the need for economic growth as well as social justice and environmental protection. Making progress towards the goal of sustainable economic development requires the inclusion of fundamental human rights and protections of our planetary systems.

One of the challenges facing sustainable development initiatives is toxic chemical exposure to human health and environmental health. This concern has become increasingly more severe and prevalent in recent decades. Chemicals are intertwined within our everyday lives from lifesaving pharmaceuticals to non-stick cooking pans and personal care products. Chemicals are present in furniture, toys, cleaning products, electronics, and even in our food supply. In the context of our global economy, chemicals have far-reaching impacts on environments and ecosystems across our planet. Even remote areas of the Arctic are not immune to persistent chemicals in the environment (Ma et al., 2011). It is important to note that chemicals often do not cause visible harm to humans. However, they can cause, as well as exacerbate chronic or acute health conditions, many of which may not be experienced until years after exposure (ILO 2020; MSP Institute, 2020a).

It is estimated that there are over 100,000 different chemicals used in commerce today (European Environment Agency, 2019). According to the United Nations (UN) Global Chemicals Outlook II report, the use, production, and trade of chemicals is growing in all regions, especially in industries that are chemically intensive such as agriculture, cosmetics, mining, textiles, electronics, and construction (UNEP, 2019). Many synthetic, manufactured chemicals have improved the quality of human life in numerous ways, such as increasing food security, advancements in healthcare, and workplace productivity. However, those benefits must also include a safe and effective approach to manage the storage and disposal of chemicals and wastes with hazardous properties. From the approximately 100,000 chemicals currently utilized in commercial production, only about 500 have robust information on their risks, hazards, and exposure characteristics, and about 70,000 chemicals are poorly characterized (European Environment Agency, 2019). While the proverbial tip of the iceberg has been well studied, thousands of chemicals still are not accompanied by the scientific information needed to confirm their safety for long-term use. One of the key findings from the UN Global Chemicals

Outlook 2019 report stated that international agreements have reduced some of the risks that are posed from chemicals and wastes, but progress is still uneven and there are implementation gaps that need to be addressed (UNEP, 2019). Overall, global goals to minimize adverse impacts of chemicals were not achieved by 2020 and urgent worldwide action is needed (UNEP, 2019).

1.1 Background

1.1.1 Gender Dimension

Gender equality is deemed important to include in sustainable development goals because of the cross-cutting links with human rights issues, globalization for sustainability, peace, control and access to resources, and environmental security and health (Castaneda et al., 2013; Corral, 2002; WECF & UNEP, 2016). Additionally, gender equality is an integral part of the larger social justice and human rights issues that we face as a society. A major goal for gender equality is fair and equal treatment for all people without regard to their gender. Many societies have made notable progress in working towards gender equality. Increasingly, governments and corporations have incorporated gender equality as part of their mission, vision, and goals. However, societies face significant challenges such as equal access to education for women and girls, gender violence and stereotyping, and conservative governments that place restrictions on issues such as abortion rights and LGBTQIA+1 protections in some countries (Sida, 2021).

Gender identity is a highly complex concept that can be interpreted in different ways. Gender is often referred to as someone's sex; however, biological sex at birth can be different from a person's gender. This research will use the current UN definition provided by the UN Women Training Center on Gender Equality (UN Women, n.d.-a):

Gender refers to the roles, behaviors, activities, and attributes that a given society at a given time considers appropriate for men and women. In addition to the social attributes and opportunities associated with being male and female and the relationships between women and men and girls and boys, gender also refers to the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/time-specific and changeable.

Gender can be viewed as a social construct, not a biological outcome (Friends of the Earth International, 2020; UN Women, n.d.-d). UN Women, a UN organization that works towards gender equality and the empowerment of women, explains that "gender identity refers to a person's innate, deeply felt internal and individual experience of gender, which may or may not correspond to the person's physiology or designated sex at birth" (UN Women, n.d.-b). It is also important to recognize that people can modify their appearance or bodily functions in different ways such as medically, surgically, or other ways of expression for example mannerisms, speech, and dress (UN Women, n.d.-b). Furthermore, gender is not limited to the binary frameworks of male or female, gender-diversity refers to people who express their gender identity "beyond the binary framework" or do not express a gender identity at all (A Gender Agenda, 2021).

1.1.2 Intersectionality

Intersectionality is discussed as to when socio-cultural factors such as race, ethnicity, sexual orientation, age, income level, etc. can impact opportunities and relations between groups of people (UN Women, n.d.-a). These multiple elements can impact not only people's relations to

¹ The term, LGBTQIA+, as it is used in this document, refers to those who identify as lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual, and + symbolizing a number of additional sexual orientations and gender identities.

others but also their relationship with the natural environment. When societal challenges are addressed in silos or viewed as separate issues, it can be difficult to further social justice goals when challenges often have interconnections and overlapping aspects. The term intersectionality, as coined by Kimberlé Crenshaw is explained in her (1989) publication detailing how Black women are sometimes left out of feminism theory as well as anti-racist politics, which describes how double angles of discrimination are faced. Systemic societal oppression can occur in combination with gender inequalities, which can further compound existing inequalities. Osborne (2015) describes this as when people belonging to multiple disadvantaged groups facing a compounding effect on their experience of oppression. Viewing this from an environmental justice lens, gender inequalities may be only one aspect affecting the larger social justice institutions in our society today. While this research focuses on international environmental law and gender equality, it is important to view this discussion from a larger intersectional perspective.

The concepts of equality and equity are normative and can mean different things to different people. Throughout this thesis, the phrase 'gender equality' is used instead of 'gender equity'; however, the author acknowledges that to work towards equality, equitable solutions are included as part of the process. The UN and other international bodies recommend using the equality terminology because "gender equity denotes an element of interpretation of social justice, usually based on tradition, custom, religion or culture, which is most often to the detriment to women" (UN Women, n.d.-b). Gender equality is used to highlight the fact that women and men have different needs, interests, and priorities which should be taken into consideration to work towards equal access and opportunities (UN Women, n.d.-b). Gender equity refers to the fair treatment of men and women in accordance with their respective needs (UN Women, n.d.-b). Gender equity can be seen as a pathway or starting point to achieve gender equality, and sometimes viewed as a conservative approach to view different genders to be separate but equal (Sida, 2016b). The Literature chapter of this thesis will further unpack this discussion.

1.1.3 Sustainable Development Agenda

Gender equality issues are human rights issues and therefore a piece of the sustainable development agenda. Measures to increase gender equality in environmental protection policies have been increasingly recognized. Various international mandates have instructed UN member states to include and integrate gender into their environmental management practices. Some examples include the 1995 Beijing Platform of Action developed at the Fourth World Conference for Women, Principle 20 of the Rio Declaration at the 1992 UN Conference of Environment and Development, and the Johannesburg Declaration on Sustainable Development recognizing women as change agents and decision-makers. The 1995 Beijing Declaration and Platform for Action Strategic Objective A4 action number 79 calls for governments and other actors to incorporate a policy of gender mainstreaming to address a multitude of gender inequalities and ensure gender perspectives are incorporated in all areas of society (United Nations, 1995). Gender mainstreaming can be defined as the process of integrating women's and men's concerns and experiences into all policies and programs (UN Office of the Special Adviser on Gender Issues, 2002). In 2013 the UN adopted a resolution to incorporate gender mainstreaming in all programs and policies within the UN system, effectively holding the UN accountable in working towards women's empowerment and gender equality issues (UNESC, 2013). Despite this progress, among others on national and local levels, significant challenges and societal barriers that impede the goal of gender equality remain prevalent (UNICEF, n.d.).

It is important to acknowledge the different experiences that women, men, and gender-diverse people face in society. Additionally, policies or programs which address environmental areas of

focus may not always align with gender equality goals. The opposite can be true as well, i.e., where gender equality does not completely align with environmental programs. For example, giving women farmers equal access to pesticides and farming practices may be perceived as contributing towards gender equality goals, but turn out to be detrimental for the environment and biodiversity when pesticides or monocropping farming techniques can harm the larger ecosystem (Sida, 2016a). The gender and environment nexus can become highly complex and has many interrelations. This thesis seeks to unpack these interconnections through an environmental policy vantage point.

The climate crisis, COVID-19 pandemic, and gender equality are all global issues. The COVID-19 pandemic has further exacerbated gender equality issues, climate change challenges, and global security (UNDP, 2020). The global nature of the COVID-19 pandemic "adds economic pressures on our society, which are complementary to existing structural barriers, discriminatory social norms and gender inequalities that are exacerbated by climate change" (Women for Climate-Resilient Societies et al., 2020, p.7). As a result, countries that are already impacted by the climate crisis are facing compounding pressures of citizen livelihoods, societal cohesion, food, and other securities (UNDP, 2020). Women and girls are impacted with multiple angles of marginalization in the shape of increased economic burden, increased violence, unequal access to land and resources (UNDP, 2020). Each of these issues are intersectional in nature and require sustainable and inclusive solutions that move the needle towards a more resilient and just future for all.

1.1.4 A Focus on Chemicals

Humans and the environment are exposed to harmful chemicals through a wide variety of interactions which run the gamut from industrial processes to personal care products. Chemicals pass through water, land, soils, and people thus making chemical exposure a transboundary issue. Some chemicals used in industry, agriculture, and everyday products can be persistent (linger in the environment for a long time), bioaccumulative (chemicals are stored and can be passed down to other organisms in the food chain), and toxic (causing acute or chronic adverse health impacts to humans) (Raven et al., 2019).

There are many ways that women may encounter exposure to chemicals. For example, women can be exposed to chemicals in their environment, as mothers, working in the informal sector, working in services or industries with higher exposure such as agriculture or textile work, as well as in the home and as consumers (WECF & UNEP, 2016). Studies have shown that women's and men's bodies can be affected differently by certain chemicals, thus, chemical exposure, impact, and risk may be different depending on the sex (MSP Institute, 2020b). One example is that up to 33% of women's chemical burden can be passed down onto the baby during the gestation period and this can lead to birth defects, childhood and adult diseases (UN CC:e-Learn, n.d.). Nonetheless, male fertility rates can also be affected by the use of chemicals in products and the environment amongst other issues (UN CC:e-Learn, n.d.).

Women's health can be disproportionately affected by hazardous chemicals in the workplace and at home because of social determinants such as gender roles and stereotypes, as well as different likelihood and susceptibility of exposure (HEJSupport International, 2020; WECF & UNEP, 2016). A representative from the International Labour Organization (ILO) stated in a webinar on gender and chemicals in different sectors: "Due to differences in social and occupational roles, and prevailing harmful stereotypes, men and women at work face different exposure scenarios in regards to the chemicals encountered, the magnitude of exposure, and the duration of exposure" (MSP Institute, 2020a 12:30).

Additionally, women may experience increased exposure to chemicals in personal care products where some of the chemical ingredients can cause irritation or allergies, or even cause endocrine disruption or cancer (WECF & UNEP, 2016). Because of traditional societal gender roles, women often spend more time in the home caring for family, completing household tasks, as well as working from home (WECF & UNEP, 2016). This can lead to greater exposure to toxic chemicals in various ways – from household cleaning products, furniture with toxic chemicals off-gassing, pest control treatments, and others (WECF & UNEP, 2016).

1.2 Problem Definition

Government legislation has been traditionally viewed as "gender-neutral and value free instruments, on the assumption that the formulation and administration of public policy benefits all members of the public equally" (European Institute for Gender Equality, 2016, p.9). However, whether unintentionally or not, policies may often impact men and women differently, which can reinforce societal gender inequalities (European Institute for Gender Equality, 2016). Polices and their outcomes can fall on a spectrum of gender-negative to gender-transformative. Gender-negative policies can reinforce gender inequalities in their outcomes. Gender-neutral policies can either not affect gender roles, stereotypes, and norms, or worsen them (UN Women, n.d.-a). On the other hand, policies can be gender-sensitive where in order to reach policy goals, the policy or program directly addresses gender roles, norms, and access to resources (UN Women, n.d.-a). Additionally, policies that are gender-positive or gender-transformative address gender inequalities as key outcomes of the policy and seek to transform gender relations to a more equal state by various means such as shared power and decision-making (UN Women, n.d.-a).

Gender issues have been increasingly addressed within the environmental discourse over the years. In climate change and water management issues gender linkages have been somewhat explored and documented, however, chemicals and gender issues have yet to be fully integrated into policy measures (WECF & UNEP, 2016). As one practitioner working in a non-profit organization on gender and chemicals issues describes: "We are at the beginning like women and gender organizations were ten years ago in the climate change debate. I think it's a long way to go, but we can learn much about [...] instruments and approaches from the other policy fields" (MSP Institute, personal communication, November 23, 2020).

There are systemic challenges as well as practical challenges which limit gender equality from being achieved in the environmental and chemicals focus areas. Systemic challenges include for example occupational stereotyping and gender norms, lack of women's decision-making powers in the workplace and unions, lack of policies regulating gender equality and equal access, and general lack of understanding of the complexities of the gender dimension (MSP Institute, 2019). Practical challenges can include the overall lack of sex-disaggregated data (scientific data studying the differentiated experiences and situations of men and women), lack of gender-diverse people's representation in studies, lack of physiological and toxicological data around chemical exposure, and lack of communication and awareness around the gender perspective within environmental issues. (International Labour Office & Programme on Safety and Health at Work and the Environment, 2013; MSP Institute, 2019). It has been suggested that data and analysis around sex and gender are many times absent in systematic reviews although there is evidence that they are both important factors to look into as far as health outcomes (Runnels et al., 2014). Moreover, the study of gender-diverse people and chemical exposure is almost non-existent (International Labour Organization et al., 2020).

Addressing systemic challenges from a legal perspective is one way to address societal issues. Passing laws and policies which regulate institutions can help create real, long-term change. Examples may include requiring unions and board members to hire an equal number of women

as men or requiring sex-disaggregated data on chemical exposure pathways. Other ways to address inequalities are awareness-raising, communication, grassroots organizing, systems thinking approaches to change, and more. With that said, it is important to note that "while law alone cannot provide all the answers to addressing gender discrimination in environmental management and sustainable development, the exclusion of legal rules considering gender issues makes the realization of these goals harder, if not impossible, to achieve." (UNDP, 2013, p.4). Furthermore, the UN Department of Economic and Social Affairs in their 2020 World Social Report calls for all policymakers to create and implement laws from an equality lens – making sure that transformational change on a global level will be felt by all, and not further impact already disadvantaged groups (UNDESA, 2020).

1.2.1 International Policy Lens

There are various angles in which to frame research around gender justice and environmental issues. This research is placed in an intersectionality conceptual framework where gender inequalities are just one piece of the social justice puzzle. Looking at gender equality issues as systemic and practical challenges, there are multiple points of entry and bodies which are working to address these challenges. For example, civil society groups lobbying for institutional change for gender equality and environmental protections. Business organizations taking public stances to incorporate gender parity in their business or changes in the supply chain to work towards social and environmental goals. Academia in furthering research around the gender and environment nexus. As well as government bodies of various levels passing policies and programs working towards the 2030 Agenda for Sustainable Development².

Global environmental governance is conducted through a variety of different angles. For example, through international organizations or agreements, governmental agencies, laws and policies, local and national initiatives (Escobar-Pemberthy & Ivanova, 2020). One way that environmental problems or challenges are addressed on an international scale is through Multilateral Environmental Agreements (hereafter, MEAs). The United Nations Environment Programme (UNEP) defines MEAs as "A generic term for treaties, conventions, protocols, and other binding instruments related to the environment. Usually applied to instruments of a geographic scope wider than that of a bilateral agreement (i.e., between two States)" (UNEP, 2007). Countries who have ratified the agreements that come into force are legally bound by the law, however, there are different compliance and enforcement mechanisms, as well as the content of the text itself which can be interpreted by countries differently.

MEAs have been described by some as a sui generis, or a unique form of lawmaking, in the way that the agreements are formally 'hard law', but the content of the agreements (which are not always presented as concrete obligations) can present as 'soft law' instruments whereas country interpretation may take different forms (Broeckhoven, 2017; Desai, 2010). This has to do with the different nature of agreements. For example, the wording of the agreements is precisely negotiated to either impose obligations upon parties or suggest them towards a goal or broader objective. The sui generis nature of MEAs will be discussed later in the Literature Review section. Nevertheless, MEAs have been described as "the most important source of international environmental law" (Desai, 2010, p.1). This research looks specifically at the international policy level through MEAs as a framework for implementation by national governments and local governmental bodies alike.

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² A framework adopted by all UN Member States in 2015 which set out seventeen different Sustainable Development Goals (SDGs) with social, environmental, and economic achievements (World Health Organization, 2019).

Whilst these different entry points could be studied by various means and from different sectors (business organization, medical field, communication awareness raising, etc.), this thesis focused on international policy frameworks around gender and environmental issues as it is a relatively newer area of focus within environmental research. This project specifically focused on evaluating policies ex-post (already ratified and implemented MEAs) to see where there are opportunities for increased gender equality. New MEAs may be in progress and the findings from this research may be of interest to the MEA's governing bodies in order to increase gender mainstreaming within international environmental agreements.

This project includes a focus on international policies in recognition of the large impact that global environmental agreements have on national governments and the great potential for positive change. One example of this is the Montreal Protocol on Substances that Deplete the Ozone Layer. This protocol was ratified by every country in the world and has been considered one of the most successful environmental agreements because parties took global action to reduce ozone-depleting substances which considerably repaired the ozone layer (UNEP, 2019). Environmental problems can be addressed through global agreements, and having MEAs in place where parties come together periodically to negotiate the next steps forward given new scientific advances and knowledge can further global goals towards a more sustainable and just future.

The effectiveness of MEAs including their limitations has been well documented (Haas et al., 1993; Steiner et al., 2003) given the caveat that multiple factors can influence environmental outcomes which can make this very difficult to measure (Clapp & Dauvergne, 2011). Other dynamics around MEAs have also been researched for example, their legal nature and design, why countries choose to join or not join agreements, negotiation and agreement-making processes, and to some extent analysis of how parties implement the agreements (Escobar-Pemberthy & Ivanova, 2020). Additionally, gender equality and environmental interconnections have been studied and researched by academia, NGOs, and governments (see the books Arora-Jonsson, 2012; Leach, 2016; Scott, 2015), however; there is a research gap on the integration of gender equality aspects in the MEA process. Conducting a web search on MEAs and chemicals results in a substantial number of intergovernmental publications and policy recommendations on the topic that shows that this issue is of high relevance which practitioners are discussing. However, MEAs which include gender protections appear to be at a more recent stage of development (Global Environment Facility, n.d.) and there were only a few publications found addressing the major challenges and barriers of gender mainstreaming and MEAs. With that said, this topic is on the front burner as a variety of stakeholders such as NGOs, policymakers, and academia are discussing how to implement gender mainstreaming in these agreements as well as in national party implementation.

1.2.2 Current Knowledge and Entry Points

Gender and environmental challenges have been increasingly included in the sustainable development discourse. Current knowledge and research in the area of gender equality and chemical exposure have increased as well in recent years. However, there is much more research and knowledge needed to address these complex challenges. For example, civil society organizations are calling for more research on gender- and sex-disaggregated data to evaluate how women may be exposed differently to chemicals (Hemmati & Bach, 2017; ILO et al., 2020; MSP Institute, 2019). Data collected on how men and women are affected differently by different chemicals can work towards creating a baseline and measuring changes and impacts in the future (Sida, 2016a). Additionally, research on the linkages between gender and the environment and their possible tradeoffs is needed to gain knowledge about how men and women are impacted differently by climate change issues (Sida, 2016a).

Another angle from which to view the inclusion of gender aspects in international agreements is by examining challenges which parties face in implementing the gender mandates or suggestions by the conventions. For example, two studies (2018 and 2020) on progress made by parties to the UN Framework Convention on Climate Change (UNFCCC) on how they have included gender aspects in their National Adaptation Plans³ were produced. The reports highlight significant progress areas such as including women as stakeholders in climate adaptation and using gender analysis tools. Areas in need of improvement were also mentioned for example an increase in gender considerations in adaptation arrangements and stakeholder engagement that is both gender-equitable and inclusive is needed (Dazé, 2020). Suggestions for parties to implement a gender-responsive National Adaptation Plan process are presented in the reports as well.

An additional angle that has been studied around gender equality and MEAs is the gender parity of treaty governing body meetings. For example, the Environment and Gender Index (EGI) methodology was created by UN Women and the International Union for Conservation of Nature Global Gender Office to monitor how different countries undertake gender and environment variables, including one which looks at the relation of men to women in environmental governance. Related EGI reports include "Women's Participation in Global Environmental Decision Making" which looks at gender parity from a global environmental governance lens, a study on women's participation and gender considerations in country representation to three chemical related conventions, a report on gender equality considerations in the Convention for Biological Diversity in the National Biodiversity Strategies and Action Plans which are a reporting mechanism similar to the prior mentioned UNFCCC National Adaptation Plans (IUCN, 2021). Other EGI global policy reports focus on the Sustainable Development Goals (SDGs) and other international environmental and gender agreements.

Given the current knowledge and multiple entry points to study the gender and environment nexus, this thesis explores the MEA secretariat angle in addressing challenges and opportunities of how gender mainstreaming efforts can be included in the planning and implementation process of the MEA system. The secretariat performs a variety of functions one of which is to ensure that the agreement's Conference of the Parties⁴ (hereafter COP) is properly functioning, including logistical and administrative support (UNEP et al., 2007). The thesis aim and research questions are presented in the following section.

1.3 Aim and Research Questions

This thesis aims to examine the characteristics and concrete processes of selected international environmental agreements which incorporate a gender equality aspect. This research will uncover challenges faced in the process of including a gender dimension in MEAs and identify gender mainstreaming opportunities going forward. This research studies and evaluates current MEAs that include a gender component or gender action plan as part of the implementation. The findings of this research seek to recommend common elements that MEAs should be addressing around gender equality and possible ways to enhance gender mainstreaming in international environmental agreements without the duplication of efforts by the governing

8

³ Reports submitted by parties which detail progress on identifying climate adaptation needs, strategies, and programs (UNFCCC, n.d.)

⁴ Conference of the Parties (COP) is the supreme body of the convention which makes the decisions on how the agreement shall be implemented. Protocols instead have a Meeting of the Parties. For the purposes of this paper, all agreements' governing bodies are grouped under COP (UNEP et al., 2007).

bodies (the MEA Secretariats). The research contributes to the conversation of increasing gender equality in MEAs and global environmental governance as a whole.

The **research questions** addressed in this thesis are as follows:

RQ1: What type of language is used in the texts of selected MEAs in relation to gender mainstreaming?

RQ2: What are the major activities and themes of the MEA gender action plans?

RQ3: What challenges and barriers have MEA Secretariats faced when including gender mainstreaming in the MEA planning and implementation process?

1.4 Overview of Methodologies

This study utilized a qualitative approach to address the three research questions. This thesis used a two-pronged approach to address the research area of gender equality and international environmental agreements. First, a **literature review** was used to examine MEAs in which gender is mentioned in the text and delineate the type of obligations which ratifying parties face with specific attention paid to the terminology used. The literature review utilized various sources to gain a high-level view of the issue and research area and to identify publications on the challenges MEA secretariats faced, as well as theories to address the research area. Data collected consisted of academic articles, books, policy documents, intergovernmental publications, grey literature, an online course, and webinars. Additionally, semi-structured **interviews** were conducted with secretariats of MEAs in order to increase understanding of major challenges and barriers to mainstreaming gender in international agreements. A step-by-step research process can be found in the Research Design chapter.

1.5 Scope

Environmental issues cannot be addressed in silos. There are linkages between multiple issues affecting the climate crisis as well as multiple interconnections. For example, hazardous pesticides used in agricultural practices can impact the health of nearby water bodies which can then impact surrounding communities that rely on water bodies as a food source causing adverse health issues. For this reason, this research does not focus on the single issue of toxic chemical exposure but addresses it as one issue of many environmental challenges which impact human health and well-being. By taking lessons learned from the gender and climate or gender and biodiversity nexus, for example, this research seeks to keep in mind the interconnections between these multiple issues to navigate opportunities on the international scale.

This project will focus on international MEAs which incorporate gender-focused language directly into the text of the MEA itself and/or through the implementation of gender action plans. In the UN system, there is a policy called the UN System-Wide Action Plan on Gender Equality and the Empowerment of Women or UN-SWAP. The UNEP gender equality work is guided by this framework as well as the UNEP Gender-Policy which sets business model guidelines for gender mainstreaming in their programs (UNEP, n.d.). The UN-SWAP is an accountability policy framework to increase gender mainstreaming work throughout the UN system (UN Women, n.d.-c). There are hundreds of MEAs and examining all of them was outside of the scope of this research. MEAs which have a gender dimension either in the agreement text or in supplemental decisions will be of focus and are listed below in Table 1-1 Details of the agreements on which this research focused on The MEAs selected for study focus on the areas of chemicals and waste (5), ozone depletion (2), biodiversity (1), and climate change (1).

Table 1-1 Details of the agreements on which this research focused on.

Agreement Name	Abbreviation	Date of Entry into Force	Number of Parties
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	Basel Convention	5 May 1992	188
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	Rotterdam Convention	23 Feb 2004	164
Stockholm Convention on Persistent Organic Pollutants	Stockholm Convention	17 May 2004	184
Minamata Convention on Mercury	Minamata Convention	16 Aug 2017	126
Strategic Approach to International Chemicals Management	SAICM	6 February 2006	05
Montreal Protocol on Substances that Deplete the Ozone Layer	Montreal Protocol	1 January 1989	198
Vienna Convention for the Protection of the Ozone Layer	Vienna Convention	22 September 1998	198
United Nations Convention on Biological Diversity	CBD	29 Dec 1993	196
United Nations Framework Convention on Climate Change	UNFCCC	21 Mar 1994	197

Source: Author's own creation with statistics from InforMEA Database.

1.6 Limitations

A central limitation which this study faced was the scope of the international environmental agreements. There are many more conventions, protocols, and treaties which could be studied; however, in the short timeframe of the thesis period, only nine agreements were selected. This gave a glimpse into the work of the MEA and gender equality nexus but does not exhaustively cover the entire history and larger picture of this work in the UN system around international agreements.

10

⁵ SAICM is a global policy framework rather than a treaty which does not require nations to become ratifying parties

Another limitation relating to the scope of the agreements chosen is that text analysis was only done on the treaty text itself and not on the Conference of the Parties' meetings and further decisions. The author made sure to access the most up-to-date version of the agreement gender action plans, however, the analysis excluded other policy documents such as National Submissions (country action plans or reporting on the convention work), individual laws and cases of party implementation around gender mainstreaming, and the multitudes of reports and publications concerning gender and the conventions of which there are thousands.

One challenge in gender analysis studies is the issue of the definition of terms used and understanding and interpretation of these terms (Runnels et al., 2014). For instance, gender and sex are sometimes viewed as single variables, however, they can be interpreted as interconnected social and biological processes that need more research to make these connections (Runnels et al., 2014). Governments and stakeholders working on gender issues may come from different academic and cultural backgrounds and delineate different meanings to the words themselves. This can result in differing interpretations of policies and programs. As far as relating to this research, analysis and conclusions were framed using the UN definitions of gender equality. However, practitioners in the field may have differing interpretations of the concepts of gender and equality themselves. The author chose to not impose her own definitions of major concepts on interviewees as to not influence the outcomes.

1.7 Ethical Considerations

This research was not funded by an external organization. The study excluded external influences and thereby provided an objective atmosphere for conducting the stakeholder interviews. The goal was to create an open and unbiased space that did not unduly influence analysis or conclusions. Additionally, stakeholder interviewees were not directly named, and their position was not disclosed, but their associated MEA convention was noted to gain a perspective of how each convention was progressing in their gender mainstreaming work. Consent from all interviewees for recording and transcriptions had been garnered pre-interview. No harm was likely to come to interviewees from this study as it only asked questions about their experience on gender and environmental subjects and avoided personal matters. Transparency in the interview process was ensured by explicitly stating before the interview what the purpose of the study was, which questions may be asked, and the interviewee's right to withdraw at any point or chose not to answer specific questions. An interview guide (Appendix B) was sent out ahead of the interview date upon interviewee request. Additionally, after each interview, the transcription was sent to the interviewee asking for any changes or updates if something was unclear or misrepresented. Interview data was only stored on the researcher's password-protected laptop and iCloud account. No other parties were granted access. The research design has been reviewed against the criteria for research requiring an ethics board review at Lund University (2021) and has been found to not require a statement from the ethics committee

1.8 Audience

This research project seeks to fulfill the final semester requirement of the Master of Science programme in Environmental Management and Policy at the International Institute for Industrial Environmental Economics (IIIEE) at Lund University in Lund, Sweden. The primary audience of this research is MEA secretariats, who arrange and service meetings of the governing body of the agreement and assist in the implementation of MEAs under UNEP (InforMEA, n.d.-d). Outcomes of this project provide suggestions in which secretariats may address gender equality issues in their work, while not duplicating the efforts of other secretariats. Environmental governance practitioners and policymakers can potentially use this research to interpret why and how gender components should be included in the planning,

implementation, and evaluation stages of policymaking. Non-governmental organizations and intergovernmental organizations may find this research useful when working in the gender mainstreaming arena within international environmental agreements. Lastly, this research may be of use to academics in the field who are researching gender mainstreaming strategies in environmental policies and specifically in the toxic chemicals reduction area.

1.9 Disposition

Chapter 1 presents a brief introduction to gender equality issues in the area of international environmental governance and defines the problem addressed in the study. This is followed by the scope and research questions that guide the study and concludes with limitations, ethical considerations, and audience in which the research is aimed towards.

Chapter 2 builds bridges between the complex research areas of gender equality conceptualizations, the legal nature of Multilateral Environmental Agreements, and theories that pertain to this research. This chapter defines central terminology considerations and themes which guide the analysis of the research questions.

Chapter 3 presents the research design and outlines the qualitative analysis research steps and logic which this project followed. A detailed, step-by-step guide of the data collection and analysis methodologies is presented in this section.

Chapter 4 details the main findings of the data collection including agreement text analysis with the gender screening template, gender action plan analysis outlining key activities and themes, and secretariat interview findings.

Chapter 5 provides a discussion of the significant findings from the empirical data collection as well as practical and academic contributions. Limitations and methodological choices are presented in this chapter as well.

Chapter 6 concludes the thesis by answering the research questions, providing recommends for MEA secretariats to consider, and suggesting future areas of research.

2 Literature Review

This chapter seeks to connect the links between gender equality conceptualizations, the legal nature of Multilateral Environmental Agreements (MEAs), and relevant theoretical constructs. The chapter begins with an introduction to gender dimensions in environmental policy setting the background of key concepts. After providing an overview of MEAs and their terminology specifications and framework used to analyze the MEA texts, the exploration continues to highlight how gender has been considered within international agreements (challenges and opportunities) to date. Acknowledging that there has been a significant amount of research and publications on gender and environmental issues, this section does not seek to exhaustively cover historical background in-depth. It serves to provide a general and brief context that sets the scene for the Results and Discussion sections.

2.1 Gender Conceptualizations

To study gender conceptualizations, one must recognize that there are differing and even contradictory definitions of the concepts and terms within this discourse. According to the Merriam-Webster dictionary, the words themselves, *sex* and *gender*, have a lengthy and intertwined history and their usage is ever-evolving (Merriam-Webster Online Dictionary, n.d.-b). This research builds on the UN definition of gender equality as the study focuses on Multilateral Environmental Agreements (MEAs) which UN bodies oversee. The UN definition of gender cited in the Introduction section is used by most organizations in the UN System. However, The World Health Organization (WHO), which is also a UN body, also mentions **gender-diverse** people in their definition (WHO, 2019) which reads as follows:

Gender refers to the socially constructed norms, roles and relations of and among women, men, boys and girls. Gender also refers to expressions and identities of women, men, boys, girls and gender-diverse people. Gender is inextricable from other social and structural determinants shaping health and equity and can vary across time and place.

The mention of gender-diverse people in this definition is significant because it includes people who identify outside of the binary male and female framework. Deciding to express oneself as male or female, or narrowing to one gender identity at all, can be constraining for many gender-diverse people (A Gender Agenda, 2021). Furthermore, there are examples of different cultures around the globe which have traditions for multiple gender expression. For example, the Native American Two-Spirit tradition can refer to people living as multiple genders simultaneously, when a person embodies both masculine and feminine spirit, or people taking on gender roles not traditionally done by their natural-born sex (PBS, 2015). However, Western societies have often disregarded these cultural traditions by focusing on binary terms to describe people (sex equals male or female, sexuality equals gay or straight, gender equals man or women) (PBS, 2015).

Additionally, the World Health Organisation (WHO) defines a person's sex as; "the biological characteristics that define humans as female or male. These sets of biological characteristics are not mutually exclusive, because there are individuals who are born with physical or biological sex characteristics who do not fit the traditional definitions of female or male" referring to intersex people (World Health Organization, 2019, p.2). One study looked at academic literature around gender-diverse people and found that people who identify outside of the gender-binary are increasingly being included in psychological, medical, and legal fields, however, the literature is still limited (Richards et al., 2016). They also state that gender-diverse people can "remain at risk of victimization and of minority or marginalization stress as a result of discrimination" (Richards et al., 2016, p.95).

2.1.1 Equality or Equity?

The terms gender equality and equity have been discussed widely over time and are important to highlight in this research project. In the literature, these concepts are often discussed as interrelated where equity leads to equality. The organization 16 Days of Allyship describes these terms as: "gender equality means equal outcomes for women, men and gender-diverse people, while gender equity is the process to achieve gender equality" (16 Days of Allyship, n.d.). Here it is recognized that women and gender-diverse people do not start on a level playing field as men because of social and historical disadvantages, therefore treating all groups equally may increase disadvantages between these groups (16 Days of Allyship, n.d.). From this point of view, gender equity can serve as a starting point for gender equality goals. This thesis will be consistent with the UN system phrasing of using gender equality when discussing these concepts.

2.1.2 Gender Mainstreaming

Gender Mainstreaming (hereafter GM) as a tool to address gender inequality was brought forth on an international scale as a global strategy in 1995 during the Beijing Platform for Action of the Fourth World Conference on Women (United Nations, 1995). Governments were called to "mainstream a gender perspective in all policies and programmes so that, before decisions are taken, an analysis is made of the effects on women and men, respectively" (United Nations, 1995, p.93) The definition of GM often referred to in the UN system is defined by the UN Economic and Social Council (1997/2) is as follows:

Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.

This concept is a building block for addressing gender inequalities. Various industry sectors have begun to leverage GM as a means to recognize and mitigate gender bias. Some examples include the field of environmental policy, architecture, and medicine. Searching the term 'gender mainstreaming' on academic search engines results in thousands of sources from books on GM in the European Union to studies about how GM has been incorporated in different sectors of society.

2.2 Gender Dimensions in Environmental Policy

There are a variety of ways to position environmental governance. For example, Steiner et al. (2003) argue that "environmental governance cannot be divorced from the economic and social pillars of sustainable development", meaning that social equity, wellbeing, and conserving natural resources go hand in hand (Steiner et al., 2003, p.228). In sustainable development discourse, this is often referred to as the 'triple bottom line' – taking into account the everevolving relationships between economic relations for example trading and market accessibility, with social aspects such as gender equality, cultural diversity, and environmental governance of resources (Steiner et al., 2003). However, in some cases, these three pillars may have contradictions which can result in compromising the effectiveness of sustainable development programs (Steiner et al., 2003).

For instance, Arora-Jonsson in her 2012 book titled "Gender, Development and Environmental Governance: Theorizing Connections" looks at two in-depth examples of environmental governance and gender intersections in the case of two rural communities – one in Sweden and

one in India. She highlights that in Sweden, government initiatives often focus on public-private partnerships where environmental issues aim to be solved using market approaches such as taxes and incentives. From the Indian perspective, rural communities face up against the state to struggle for environmentally healthy practices (Arora-Jonsson, 2012). However, in both of these contexts, she found that both community-based local action, as well as Neoliberal economic influences, had an impact on environmental governance. Neoliberal economics sometimes referred to as neoliberal capitalism, is discussed as the monetization of everything including nature, peoples' relationships, and women's bodies and work (Friends of the Earth International, 2020). This type of free-market capitalism is described as benefiting from systemic inequalities and reinforces oppression and inequalities (Friends of the Earth International, 2020). A major outcome of this book is the details of how gender and power relations in the decision-making process relate to outcomes of environmental governance and development.

Viewing environmental governance from an intersectional perspective illustrates that policies can intersect with gender dimensions in multiple ways – culturally, economically, politically, and physically to name a few. Table 2-1 below provides a simplified overview of examples found in the literature in which gender equality issues can intersect with different areas of societal dimensions.

Table 2-1. Examples of gender dimensions and description of gender-specific approaches.

Dimensions	Description
Socio-economic Keywords: gender division of labor, access to resources, property ownership, poverty, income, education access	The division of labor in paid and unpaid work correlates with differing effects of climate change and sustainable development.
Socio-cultural Keywords: cultural patterns and norms, religion	Men and women have different experiences accessing social resources such as green spaces, public transportation systems, and natural resources.
Socio-psychological Keywords: gender roles, gender identity, gender-specific behavior, risk perception, attitudes, life expectancy (behavior related)	Focus on gender identity and expressions of masculinity or femininity. Gender roles are based on the expectations of society of being a woman or man.
Legal Keywords: anti-discrimination, protection, land rights	Legal instruments may claim to be gender-neutral, but this doesn't mean that all forms of gender discrimination are removed, and gender equality is achieved.
Political Keywords: governance, power, policy instruments, policy mixes, participation, empowerment	Male-dominated sectors which have a great influence on environmental related decision-making are leaving out women who may have different attitudes and perceptions towards environmental issues and opportunities.
Physical, biological Keywords: different physiological response to chemical exposure, pollution, life-expectancy	Physiological differences between males and females may have different health outcomes to environmental events and occurrences over time.

Source: Adapted from Genanet's webpage on "Gender Dimensions in Environment and Climate Policy" (Genanet, n.d.)

This research seeks to take an intersectional approach to examine different ways in which environmental policies and programs can have effects on society. Looking at these different dimensions presented above aims to present a background for the analysis of international environmental agreements and how gender action plans might include a gender lens in their adaptation. Table 2-1 provides a framework to organize the practical and/or organizational challenges found in the empirical data into larger systemic categories with the goal of identifying areas of opportunity.

The UN Gender and Environment course highlighted some key examples of these dimensions. One relating to the socio-economic dimension was women working in fisheries management are often doing fish processing tasks which is not as socially recognized or financially rewarded as men's decision-making and management roles in fisheries (UN CC:e-Learn, n.d.). Another layer to this example could be the socio-psychological dimension where women working in these laborious conditions may have detrimental impacts on their physical or mental health (UN CC:e-Learn, n.d.). An example relating to the legal dimension is access to land ownership. According to the International Union for Conservation of Nature (IUCN), only 28 countries allow women and men to own land equally (Fauconnier et al., 2018). Without legal land rights, women farmers for example have limited decision-making power and little to no access to credit or ability to pass on land to their children for future access (UN CC:e-Learn, n.d.). Nonetheless, these gender dimensions do not only affect women. For example, male farmers in India and Africa have reported increased suicide rates when farms are failing (UN CC:e-Learn, n.d.). This perpetuation of gender roles can be harmful to men and women in their different working industries. Additionally, environmental factors such as exposure to certain chemicals can impact male fertility rates which relates to the physiological differences between men and women (UN CC:e-Learn, n.d.). There are many more examples of gender dimensional impacts in the environmental governance field.

2.2.1 Feminism Theory and Intersectionality

This research builds off feminism theory and seeks to take an intersectional approach to address the empirical data collected. The term 'feminist' does not have one accepted definition. There are multiple different interpretations of the term similarly to the gender equality and equity discussion. Media has popularized feminism as a women's liberation movement with the major aim of working towards women becoming social equals of men (hooks, 2015). Building on this, the Merriam-Webster definition of feminism is "belief in and advocacy of the political, economic, and social equality of the sexes expressed especially through organized activity on behalf of women's rights and interests" (Merriam-Webster Online Dictionary, n.d.-a). Hooks (2015) argues that these definitions are problematic in the way that people understand 'equality' in different ways. This dynamic can complicate the movement's work when there is a lack of common understanding. Hooks goes on to explain when the feminist movement is simplified to 'women's liberation', it ignores the intersectionality lens entirely which adds another level of discrimination, oppression, or exploitation (hooks, 2015).

The transformative and social justice aims of this research project intersect with feminist theory in a few ways. Intersectionality is closely linked with the feminist understandings of knowledge production and power relations (Kaijser & Kronsell, 2014). If we examine the philosophy of science from a positivist view, where observations and measurements of the world around us are a way to determine knowledge and truth, this can lead to a skewed version of reality depending on who is conducting research and their existing personal biases (Lasker & Simcox, 2020). For example, Ong et al. (2016, p.1) argue that "the prevailing culture and structural

manifestations in STEM⁶ have traditionally privileged norms of success that favor competitive, individualistic, and solitary practices – norms associated with white male scientists". Trochim (2020) states that from a positivist view, scientists have the responsibility to put aside their beliefs and biases when conducting research. However, if we reframe to a post-positivist worldview, theorists reject the idea that anyone can truly put aside their biases and see the world as it is (Trochim, 2020). Trochim (2020) goes on to state that our greatest hope in working towards true objectivity is to utilize triangulation to discover multiple imperfect perspectives to advance to a more equitable view of the world. Then, moving to a feminist thinking standpoint, some theorists argue that scientific questions should aim to be "rooted in justice, freedom, and equity movements that embrace intersectionality and interdisciplinarity as fundamental aspects of inquiry, discovery, and problem solving" (Lasker & Simcox, 2020, p.3).

The conversation around GM and intersectionality is one of particular interest in this research as this project aims to take an intersectional approach. A review of UN publications around gender resulted in a variety of mentions relating to intersectionality. UN Women, UNDP's Powerful Synergies: Gender Equality, Economic Development and Environmental Sustainability Report, and the 1995 Beijing Declaration and Platform for Action recommend taking a multidisciplinary and intersectional approach when implementing GM in policies and programs (UN Women, n.d.-b; UNDP, 2013; United Nations, 1995). However, GM and intersectionality have received criticism when using intersectionality as an add-on approach. For example, in Hunting and Hankivsky's (2020) article, they caution international organizations against co-opting intersectionality in GM efforts and argue that GM and intersectionality are inherently contradicting concepts. They state that "in seeking to capture intersecting dimensions of inequity, intersectionality resists assuming that any single factor (e.g., gender or gender inequality) has utmost significance or can explain any given situation" (Hunting & Hankivsky, 2020, p.432). This raises questions regarding how GM and intersectionality approaches work together or work against each other.

2.2.1.1 Frameworks in the Gender and Environment Nexus

From a feminist research perspective, there have been a few different frameworks which academia has used to address the interconnections between gender equality issues and environmental issues. Castaneda, I., Aguilar, C., & Rand, A. present a table depicting the main theoretical models used in their (2013) research paper.

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⁶ Science, technology, engineering, and mathematics

Table 2-2. Main models used to understand and analyze the interconnections between gender and the environment

Ecofeminist	Women in Development (WID)	Gender and Development (GAD)
Conceptualizes the relationship of women with nature, maintaining that there is a strong link between the two. Maintains that women's experiences (biological or cultural) give them a different natural mindset, a special knowledge that will enable them to save the planet and a tendency to protect the environment.	Assumes that women are the main volunteers in the fight against environmental degradation. Stresses the potential of women's role as day-to-day administrators of natural resources. Much is made of women's vulnerability to environmental change due to their dependence on these resources. Development projects and programs center on women and their needs as individuals and groups.	Maintains that discrimination against women is expressed in our societies mainly through: (i) division of labor; (ii) access to resources; and (iii) participation in decision-making. Accounts for social relationships of production and power. Identifies and seeks to evaluate the differences that exist between women and men by emphasizing the social, historical, and cultural nature of the processes of subordination and negotiation in which they are involved.

Source: Castaneda, I., Aguilar, C., & Rand, A. (2013), p.670.

Building off these models explained in Table 2-2, there is also the feminist political ecology platform which has emerged as an analytical framework in which to view gender and environmental linkages. This framework as described by Rocheleau (1996) is a perspective which "treats gender as a critical variable in shaping resource access and control, interacting with class, caste, race, culture, and ethnicity to shape processes of ecological change, the struggle of men and women to sustain ecologically viable livelihoods, and the prospects of any community for "sustainable development" (Rocheleau et al., 1996, p.4).

This master's thesis will focus on framing the gender and environmental governance analysis by including the gender and development (GAD) framework and feminist political ecologist paradigms. These viewpoints suggest the inherent intersectional approach by including social and cultural factors. Exploring these perspectives will assist in helping answer RQ3 when discussing the major challenges and barriers to including GM within the MEA system.

2.3 Setting the Scene: Background on MEAs

2.3.1 Legal Nature of MEAS

Many environmental issues are not limited to one country or one region. For example, in the case of toxic chemicals – persistent "forever chemicals" produced and used in industrialized countries can end up in the environment many years after production, even after being banned from use (Diaz & Stewart, 2019). As environmental issues were realized to be global in nature, international communities sought out to organize effective actions to address different environmental challenges. MEAs are classified as agreements between three or more nations, while bilateral agreements are between two nations. They are specialized policy instruments that address particular environmental problems or sectors.

MEAs are recognized as sources of international law by the International Court of Justice Statute in Article 38 (1) (ICJ, 1946). Countries that ratify the agreement are agreeing to participate in the legal requirements which the MEA sets out and are hereafter referred to as

"parties" to the agreement. In some cases, the agreement might set out objectives and specific targets or standards which establish management of the environmental issue at hand but does not directly set out how national governments apply these conventions (Steiner et al., 2003). In other cases, MEAs serve as a framework that sets directions, but not necessarily specific targets or standards which parties need to meet. Implementation falls on national governments to develop mechanisms to fully integrate the range of MEA commitments into their domestic law, often involving collaboration among different stakeholders such as non-governmental organizations (NGOs), civil society, and inter-governmental organizations (IGOs) (Steiner et al., 2003).

The subject matter of MEAs is wide in range – the United Nations Environment Programme (UNEP) groups them in the following categories: biological diversity, chemicals and waste, climate and atmosphere, environmental governance, land and agriculture, and marine and freshwater (InforMEA, n.d.-a). On InforMEA, an online UN database on environmental agreements, when filtering only for multilateral environmental agreements, there are 54 regional? treaties and 33 global treaties (InforMEA, n.d.-a). Within an MEA, in some cases, there are subsequent protocols or agreements which accompany the MEA that are also legally binding to the parties who choose to ratify (UNEP et al., 2007). For example, the 2015 Paris Agreement is a treaty that builds upon the UN Framework Convention on Climate Change (UNFCCC) which sets goals for all ratifying parties to take ambitious climate change mitigation and adaptation steps (InforMEA, n.d.-c). Additionally, there are designated policy frameworks that are not classified as treaties themselves such as the Strategic Approach to International Chemicals Management (hereafter SAICM), which are also managed in similar ways to MEAs with secretariat bodies and Conferences of the Parties (COPs). The SAICM global policy framework was an outcome of the 2002 World Summit on Sustainable Development which promoted the sound management of chemicals throughout the lifecycle to protect the health of humans and the environment (InforMEA, n.d.-e). SAICM differs from conventional treaties since it does not require parties to comply with the objectives that the framework sets out. SAICM stakeholders have the same voice in negotiations; however, in conventional treaties, parties to the convention have a stronger negotiating voice than non-parties and civil society. Overall, UNEP is responsible to coordinate the MEAs, additional protocols and agreements, as well as global policy frameworks.

2.3.2 Hard Law and Soft Law

Some MEAs can be described as 'hard law', while others can be characterized as 'soft law'. For example, Agenda 21, a non-binding action plan set forth by the UN as an outcome of the 1992 Earth Summit, and SAICM, a global policy framework, would be classified as soft law since there are no ratifying parties or legally binding objectives in these agreements. According to the UNEP Multilateral Environmental Agreement Negotiator's Handbook (2007), "hard law has specific and legally binding obligations, and soft law is either not legally binding or the obligations are flexible or lack specificity" (UNEP et al., 2007, p.35).

MEAs have been described as being drafted with "considerable flexibility" meaning that provisions do not always set a clear compliance requirement (UNEP et al., 2007, p.35). Instead, they allow for interpretation on how parties can meet obligations. Some publications have described that even though soft law instruments are non-binding, they can still have significant legal relevance and influence amongst environmental behavior in countries (Broeckhoven, 2017; UNEP et al., 2007). Additionally, soft law non-binding obligations such as guidelines,

⁷ Referring to agreements between countries in specific regions such as Barcelona Convention between Africa and Europe or the Cartagena Convention concerning countries of Latin America and the Caribbean (InforMEA, n.d.-a). declarations, resolutions, and communications such as memoranda of understandings may be structured to encourage increased participation in a proposal. As well as provide an obligation of good faith of the parties which participate (UNEP et al., 2007).

MEAs are a flexible tool of international law. They are not stagnant and can be updated in time or place (Desai, 2010). For instance, each MEA has a separate COP which meets periodically to examine the implementation of the convention as well as adopt future resolutions and decisions around the agreement (InforMEA, n.d.-b). Additionally, policy frameworks such as SAICM set goals for sound management of chemicals and waste by 2020 and are currently in the process of updating these goals in a multi-stakeholder process called "SAICM Beyond2020" (MSP Institute, 2019). The Stockholm Convention on Persistent Organic Pollutants (POPs) produces a list of POPs which parties are required to regulate, and this list is updated periodically as continued research on the effects of this class of chemicals are published.

2.3.3 Institutionalized or Fragmented?

There has been much discussion and past literature on the strengths and weaknesses of MEAs as an environmental governance approach. One major suggested benefit of MEAs is the ability to address transboundary environmental problems through a harmonized, framework approach instead of fragmented approaches by countries (Steiner et al., 2003). On the other hand, because there are nearly one hundred MEAs that cover very differing environmental issues from endangered species to hazardous waste pollution, some argue that the ad-hoc manner that MEAs are created presents a fragmented approach to environmental governance which presents many challenges when attempting to regulate broad areas such as oceans and biodiversity (UNEP et al., 2007).

Some argue that the increasing number of MEAs established in recent years has led to a "gradual institutionalization" of environmental laws internationally. However, as mentioned above, some argue that this has also increased fragmentation of environmental and sustainable development goals (Desai, 2010, p.3). As each MEA addresses a separate environmental area, there may be less attention paid to how these environmental issues interconnect. For example, Steiner et al. (2003) argued that an 'ecosystem framework' is needed where assessments of each problem and how it intersects with other environmental issues should be taken into account so that one agreement's goals do not undermine another (Steiner et al., 2003). Nonetheless, not all MEAs focus only on one specific environmental issue. The UN Convention on the Law of the Sea covers a variety of issues that govern access rights of the ocean, marine debris, fisheries, invasive species, and ship-based marine pollution (InforMEA, n.d.-f). Steiner et al. (2003) calls these types of agreements "umbrella agreements" and notes that they can lead to nations raising the bar on adapting new environmental approaches.

One such approach sometimes brought up in tandem with MEAs is a 'precautionary approach' to environmental governance. For example, the SAICM global framework in Objective IV/A14/e states that one objective is to: "appropriately [...] apply the precautionary approach, as set out in Principle 15 of the Rio Declaration on Environment and Development, while aiming to achieve that chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment". Principle 15 of the Rio Declaration says that if there are serious potential threats to the environment, action should not be postponed to prevent environmental degradation even if there is a lack of "full scientific certainty" (United Nations, 1992). Additionally, the Stockholm Convention preamble references that an embedded precautionary approach underlies the convention.

Additional benefits of MEAs include increasing worldwide access to knowledge, spreading awareness of financial resources and tools, and mandating change amongst domestic

governments to take action on environmental issues (Steiner et al., 2003). Another recent development is the emergence of multi-stakeholder participation around the MEA process. Since the 1972 Stockholm Conference, there has been an increased engagement of non-state actors in treaty negotiations (UNEP et al., 2007). As a result, NGOs and civil society have a prominent voice in the planning, decision-making, and implementation process of international agreements (UNEP et al., 2007). Nonetheless, it is still the sovereign state parties who are bound by the convention that have the final say in negotiations.

2.3.4 Role of the Secretariat and MEA Synergies

As mentioned above, the highest COP of each MEA meets to decide on new decisions regarding the agreement. Most MEAs have a secretariat that performs specific functions to the agreement's governing body of the COP and subsidiary bodies (UNEP et al., 2007). The secretariat services and arranges meetings of the governing body. As well as assisting parties in coordinating the implementation of the convention (InforMEA, n.d.-d). Secretariats of MEAs are presumed to be neutral bodies as their primary objective is to serve parties (UNEP et al., 2007).

Although each convention has a specific focus, there have been efforts to harmonize performance reporting across MEAs (UNEP, 2007). For example, several biodiversity-related MEAs coordinate regular meetings with the Rio Conventions (the UN Framework Convention on Climate Change, UN Convention to Combat Desertification, and the Convention on Biological Diversity) in efforts to identify areas of coordination (UNEP, 2007). Another example is the merging of three chemicals and waste-related conventions: the Basel Convention, Rotterdam Convention, and Stockholm Convention (BRS Conventions). The COPs of these conventions voted on a series of decisions that establish synergies between the conventions such as simultaneous extraordinary meetings of the COPs, coordination around decisionmaking, administrative issues, information management, public awareness, technical issues, and organizations issues such as a combined secretariat and joint audits of the conventions (Secretariat of the BRS Conventions, n.d.). There have been publications by UNEP as well as other UN organizations which reviewed the work undertaken by MEAs and suggest ways to avoid duplication of work by the COPs by increasing synergetic collaboration (UNEP World Conservation Monitoring Centre, 2004). Additionally, UNEP created a voluntary reporting tool in 2018 where parties to MEAs can share knowledge, data, and information on different conventions (UN WCMC, n.d.).

2.3.5 Terminology Specifications

The terminology used in MEA texts as well as subsequent decisions, memorandums of understandings, and other documents relevant to the MEA is carefully decided upon by the parties (UNEP et al., 2007). The difference of wording use of 'should' or 'shall' for example provides a clear difference whether parties are legally obligated to act or as the former suggests, they are encouraged to act but not legally bound. Broeckhoven (2017) describes that even the slightest change in a verb can result in a significant difference in the commitment the country is making when ratifying the agreement.

The use of hortatory, or suggestive and aspirational wording, such as 'may', 'should' implies that parties can take action, but are not obligated to do so. This type of hortatory language is often times seen in the preamble section of the treaty, which sets broad objectives and sets the context of the operative paragraphs of the treaty (Broeckhoven, 2017). The Convention on Biological Diversity (CBD) preamble states that the parties are "Recognizing also the vital role that women play in the conservation and sustainable use of biological diversity and affirming the need for the full participation of women at all levels of policy-making and implementation for biological

diversity conservation" (United Nations, 1993). Other hortatory language examples can include the terms 'acknowledging', 'considering', 'encouraging', 'noting', 'stressing', 'urging', and 'welcoming'.

Academics and policy analysts have brought up the fact that the legal obligations prescribed by MEAs can sometimes be vague and this might add difficulty for the party to translate obligations into national policies (Escobar-Pemberthy & Ivanova, 2020). While examining international energy efficiency policies from a larger climate change context – Bruce (2013) argues that national energy efficiency laws have been influenced positively by international law; however, a lack of uniform and binding international treaty language has inhibited progress as a whole.

A reference to GM in the text of an MEA can serve as a starting point for further action by the parties and governing bodies. For example, Decision 83/68C as agreed upon during the 84th Meeting of the Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol stated that a major challenge was "how to ensure that these existing policies were implemented systematically in the context of Multilateral Fund supported projects since the Montreal Protocol text does not include a specific reference to gender issues" (UNEP, 2019b, p.2).

In UNEP's MEA Negotiators Handbook (2007), it is highlighted that the type of language used in an agreement should be as clear as can be in order to ensure compliance by Parties (UNEP et al., 2007). However, the occurrence of "constructive ambiguity to produce agreement" which can sometimes occur in the late hours of negotiations where there is a differing of opinions can lead to confusion on how to implement the treaty (UNEP et al., 2007, p.355). In some agreements, there are very clear links to implementation. For example, the Minamata Convention Annex C/1/I states that parties shall include "strategies to prevent the exposure of vulnerable populations, particularly children and women of child-bearing age, especially pregnant women, to mercury used in artisanal and small-scale gold mining" in their national action plans. This does not leave room for ambiguity as far as the whether or not this can be included in the action plan. Additionally, in the next section, Annex D states that parties may include a list of items, but it is a suggestion, not a requirement. Conversely, some treaty language contains vague links to implementation. For example, in the Stockholm Convention Article 7/2 is stated that "The Parties shall, where appropriate, cooperate directly or through global, regional and subregional organizations, and consult their national stakeholders, including women's groups and groups involved in the health of children, to facilitate the development, implementation and updating of their implementation plans" (Idowu et al., 2013).

This background research has led to the creation of a gender template (inspired by Broeckhoven's (2017) doctoral thesis) which is used as a frame of analysis for the text of the conventions in this project. Broeckhoven conducted a screening of where gender was mentioned in the Rio Conventions (UNFCCC, CBD, and UNCCD) and did not find a readily available screening tool in which to analyze the language used in MEAs and thus created one. The template used in this project is a pared-down version and does not go into as much detail. The Broeckhoven template includes a greater level of detail about the use of terms, use of declarative sentences, verb strength, and more detail on of word choice. The version adapted from Broeckhoven's thesis provides a starting point for analysis of the MEA text for this thesis, but as this project is not used in obtaining a law degree, a more general overview will be used. See Table 2-3 below for the term/reference code and a description and example of each item.

Table 2-3. Gender template adopted from Nicky Broeckhoven's 2017 Doctoral thesis

Reference Code	Description & Example
Action-oriented Language	Wording such as "shall" or "ensure". Ex: To ensure equal participation of women in decision-making on chemicals policy and management.
Add-on Language	Gender is mentioned as an add-on or part of a list. Ex. Aware of the health concerns, especially in developing countries, resulting from local exposure to persistent organic pollutants, in particular impacts upon women and, through them, upon future generations.
Hortatory Language	Wording such as "recognizing" and "aware of" in contrast to action-oriented language which requires the action of parties. Ex. Recognizing also the vital role that women play in the conservation and sustainable use of biological diversity.
Link to Implementation – Clear	There is a clear mention of gender aspects in an implementation objective: Ex. The increase in participation of local populations and communities, including women, farmers and pastoralists, and delegation to them of more responsibility for management.
Link to Implementation – Vague	There is a vague mention of gender aspects in an implementation objective, but not a clear set of obligations: Ex. The Parties shall, where appropriate, cooperate directly or through global, regional and subregional organizations, and consult their national stakeholders, including women's groups and groups involved in the health of children, to facilitate the development, implementation and updating of their implementation plans.
Operative Text	Refers to mentions of gender aspects in the body or operative text of the convention which sets obligations to parties
Preamble	Refers to mentions of gender aspects in the preamble, or non-operative section of the convention.
Slippery Negotiation Words	Words or phrases which are used to suggest actions by parties that are usually conditional: Ex. "as appropriate" or "as necessary" where parties can decide how to take action. "consider", "may", "urges", "should" all suggest action, but do not require.

Source: Author's adaptation of Broeckhoven's Gender Template in the 2017 Doctoral thesis 'Integrating Gender Into the Rio Conventions: An International Legal Perspective".

2.4 Status of Gender and MEAs

The third research question of this thesis seeks to uncover challenges and barriers faced by the MEA secretariats when implementing and planning aspects around gender equality. This section provides a 'state of the art' where the literature review findings will be compared with the interview findings. This section begins with a historical look into the gendered language in the UN system, highlights key UN publications which detail historical aspects of how gender issues became included, and concludes with a summary of current publications on MEAs and their challenges highlighted.

2.4.1 MEAs and Gendered Language

Gender has been discussed in the UN system for the past three decades and various international mandates have been created specifically connecting gender and environmental

issues (Broeckhoven, 2017). Over time, there have been changes in how gender is mentioned. For example in the 1972 Stockholm Conference on the Human Environment, the first major UN meeting on environmental issues and human impact on the environment, the outcome document failed to mention women and used gendered language (Broeckhoven, 2017). The preamble refers to 'man' and 'his' language when describing human relationship to nature; "Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth" (United Nations, 1972). The Declaration stayed the same until 1985 when the interconnections between women's involvement and relation to sustainable development were discussed at the Third World Conference on Women. There it was recognized that gender equality is not an isolated challenge, but should be incorporated in all human activities including human's relation to the environment (United Nations, n.d.). A few years later in 1987 when the Brundtland Report was released, it referenced women and their relationship to sustainable development (World Commission on Environment and Development, 1987), however, the report suggested that urgent steps are needed to limit population growth and speaks of women and their ability to choose the size of their families, not as change agents in the environmental field. A major turning point was the UN Conference on Environment and Development in 1992, sometimes referred to as the Earth Summit or Rio Process.

The Earth Summit in 1992 was strongly influenced by the involvement of women's groups in the pre-meeting session as well as during the meeting itself (UN Chronicle, n.d.). Over 1,500 women came together to create the Women's Action Agenda for the 21st Century which was adopted by the conference into the Agenda 21 text (UN Chronicle, n.d.). Other than this landmark language adoption, a Women's Major Group and Caucus were created from this meeting and created a network of gender equality activists who continued to fight for rights in the UN system and beyond (UN Chronicle, n.d.). The Earth Summit led to the creation of the Rio Declaration which had updated the gendered language of the Stockholm Declaration by changing the terms 'man' to human beings', as well as declaring that "Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development" (United Nations, 1992, Principle 20).

Significant international agreements which resulted from the Earth Summit of 1992 were the three Rio Conventions: UN Convention to Combat Desertification, Convention on Biological Diversity (CBD), and the UN Framework Convention on Climate Change (UNFCCC). The first two both have mentions of the term 'women' in the agreement text itself, while the third does not. Fast forward to the 2012 United Nations Conference on Sustainable Development Conference, referred to as Rio+20, women's organizations fought to keep women's rights in the language of the texts, however, some governments were resistant (Broeckhoven, 2017).

Still, women are sometimes categorized into a list of vulnerable populations. The Environment and Gender Index (EGI) methodology was created by UN Women and the IUCN Global Gender Office to examine how countries are implementing the MEA commitments in relation to gender equality. In the Stockholm Convention, countries submit National Implementation Plans on their reporting to the convention's requirements. The EGI examined 150 submitted reports over an eleven year period (2005 to 2016) and found that while 91% included at least one gender or women term, only 2% characterize women as agents of change and 41% consider women as part of vulnerable populations (Gilligan & Sabater, 2017).

2.4.2 Challenges and Barriers to Addressing Gender in the MEAs

The author conducted a review of the available literature and online publications aimed in finding out what were the barriers and challenges to advancing a gender lens in MEAs. Surprisingly, there were only a few publications found which addressed this question.

Broeckhoven's doctoral thesis from 2017 was one publication that looked specifically at how a gender lens was integrated into the Rio Conventions with great detail on the historical inclusions and decisions leading up to 2016. Another document that described some of the challenges of including a gender lens into MEAs was a background document by the Ozone Secretariat from 2019. This document highlighted potential organizational and programmatic challenges and opportunities in advancing GM in the ozone treaties. Lastly, a 2012 brochure published by the Secretariats of the Rio Conventions detailed actions on gender and highlighted challenges and opportunities faced. A synthesis of the challenges documented in these three publications is presented below in Table 2-4. Table 2-4. Organizational and programmatic challenges regarding gender mainstreaming in MEAs.

Table 2-4. Organizational and programmatic challenges regarding gender mainstreaming in MEAs.

Organizational Challenges	Programmatic Challenges
 Focus on gender parity instead of systemic gender inequalities Secretariat staff understanding, technical knowledge, and resources Lack of explicit gender mainstreaming mandate Funding and resource availability Low availability of qualified women in science and technology 	 Lack of sex- and gender-disaggregated data Stakeholder acceptance and understanding of the importance of gender equality in MEAs Limited understanding of gender equality and environmental linkages Lack of direct influence on the national level without a gender mainstreaming mandate Requirements to parties or secretariats

Source: Author's own summary from Ozone background document (2019), Rio Convention Secretariat Brochure (2012), and Broeckhoven's thesis conclusions (2017).

According to Broeckhoven's (2017) analysis, one of the limitations of advancing gender equality in MEAs was a focus on gender parity and women's participation, rather than systemic gender equality. This challenge was expressed by NGO advocate groups in the MEA negotiation process for the UN Framework Convention on Climate Change (UNFCCC). During the 2014 UNFCCC COP20 in Lima, Peru, the Women & Gender Constituency and Women's Caucus worked for over two weeks throughout the negotiations to support climate goals with a specific gender lens (Women & Gender Constituency, 2014). During this meeting, the two-year Lima Work Programme on Gender was launched which aimed to incorporate gender balance and a gender perspective into the work of the secretariat and parties (UNFCCC, 2021). However, the NGO advocate groups were fighting for more than just gender balance. During the negotiations, the Women & Gender Constituency determined that a major challenge was when governments traded the language of 'gender equality' for 'gender balance' (Women & Gender Constituency, 2014). Despite this, and after many years of continued advocate work and discussions, Broeckhoven's (2017) conclusions around gender and the UNFCCC found that progress has been made from the initial focus on gender parity to a more systemic examination around gender inequalities, and entry points to address these issues has increased.

A phenomenon referred to as the 'gender data gap' has emerged in recent studies. UN Women states that it is difficult to monitor the progress of women and girls when there is a lack of data on differentiated impacts on men and women (UN Women, 2018). In the 2019 book by Caroline Criado-Perez, the author goes into detail about how the gender data gap exists throughout different areas of society – in daily life, in the workplace, in the medical field, and others. Criado-Perez shares examples of the different ways gender data gaps are present in government thinking. For example in calculating the Global Domestic Product (GDP) of a

country, unpaid household work, often done by women, is often left out (Perez, 2019). As a result of this data gap, women continue to be harmed by male-biased policies that governments produce (Perez, 2019). In the various gender data gaps found in different areas of society, Perez (2019) states that this is partly because of a failure to collect data needed, and also due to the male dominance of global politics. The author goes on to reference decades of evidence showing that when women are in political roles, this makes a measurable difference in the policies that get passed in the country with a greater focus on women and gender equality (Perez, 2019).

Focusing on the area of sustainable development, gaps in gender data are limiting the measurement of progress for women and girls around the world (UN Women, 2018). UN Women (2018, p.1) states that "unless gender is mainstreamed into national statistical strategies and prioritized in data collection, gender data scarcity and gaps will persist". Across the 17 UN Sustainable Development Goals (SDGs) there are 54 gender-specific indicators and one goal specifically focusing on gender equality, SDG 5 (UN SDGs, n.d.). However, six SDGs are lacking any gender-specific indicators including sustainable consumption, energy and the environment, water and sanitation, and industry and innovation (UN Women, 2018). Another challenge that UN Women recognizes as limiting gender equality goals in the SDGs is the gaps in intersectional data and the quality of available data between countries and across time (UN Women, 2018). There has been some progress in this area with the SDGs and gender-specific indicators, but there is also much more progress needed to work towards the goal of gender equality. Taking a step back to examine the SDGs and their intended outcomes - some have argued that the SDGs were developed from a Western worldview and are counterintuitive to some cultures in the Global South for example (van Norren, 2020). Van Norren (2020) argues that the SDGs ignore the intrinsic value of nature, and instead promote a linear growth model that depends on unlimited exploitation of natural resources.

Lack of gender- and sex-disaggregated data and linkages between gender and environmental issues continue to be a barrier mentioned in the literature. In the climate change discourse, an article by Hemmati and Röhr explore the challenges of working towards gender justice in climate negotiations (M. Hemmati & Röhr, 2009). Major barriers include the lack of gender-sensitive data, as well as gaps in knowledge on the linkages between climate change and gender justice (M. Hemmati & Röhr, 2009). Similarly, in the chemicals and waste sector, these same challenges are mentioned. For example, the MSP Institute highlights that "specific and widespread knowledge on differentiated and long-term effects of chemicals on women and men as well as comprehensive gender analysis of chemicals and waste management is still lacking" (MSP Institute, 2020b, p.3). Additionally, the 2019 Ozone gender background document states that in the country-level reporting for the Montreal Protocol, gender-disaggregated data is not collected or the findings are not reported because it is not a listed requirement of the Protocol (Ozone Secretariat, 2019).

Secretariat staff understanding is another contributing factor that is mentioned as a challenge in the Ozone background document. Understanding the importance of GM in the work of the ozone treaties, and the potential lack of technical knowledge around developing a gender plan of action that is "relevant, effective and produces measurable results" is cited as an organization challenge (Ozone Secretariat, 2019, p.31). Another organizational challenge identified is the lack of a specific gender task team in the Ozone Secretariat (Ozone Secretariat, 2019). A GM task team could potentially aid in the sex-disaggregated data collection and analysis among other activities (Ozone Secretariat, 2019).

Another barrier to increasing GM efforts in MEAs can be underscored within implementation challenges. Are requirements and obligations directed towards secretariats, or are they directed to the parties of the convention? In 2008 when the CBD adopted its Gender Plan of Action,

the plan directed its activities and targets towards the secretariat and left out actions that parties could take (Broeckhoven, 2017). This can also be viewed as a strategic choice or beginning first steps to addressing gender justice instead of a challenge. Nonetheless, when the Gender Plan of Action was updated to the 2015-2020 plan, it highlighted work that the secretariat, as well as parties, can take to mainstream a gender perspective in the convention (UNEP, 2014). Additionally, this same challenge was listed by the Ozone background document whereas parties did not explicitly mandate GM work in the activities of the ozone treaties and subsequent institutions (Ozone Secretariat, 2019)

Funding mechanisms (or lack thereof) often represent a challenge or an opportunity for advancing MEA gender mainstreaming. In the case of the ozone treaties (the Montreal Protocol and Vienna Convention), the Multilateral Fund, which is the Montreal Protocol's funding mechanism, has faced a few different challenges when it comes to incorporating a gender perspective in their projects. First, a specific policy that promotes gender issues was not available (Ozone Secretariat, 2019). In the Rio Conventions "Action on Gender" brochure from 2012, it is stated that "although awareness on gender mainstreaming has been increasing, effectiveness is limited by the low level of financial and human resources available to the secretariat: (Convention on Biological Diversity et al., 2012, p.13).

Other challenges cited by the Ozone document were "the limited information on gender issues within the wide range of project activities and scarcity of resources; stakeholders' limited awareness of gender issues; insufficient knowledge of how to mainstream gender; and low availability of qualified women in science and technology" (Ozone Secretariat, 2019, p.28). Stakeholder's limited awareness was also mentioned as a challenge within the Rio Conventions where an increased understanding of gender issues was called forth (Convention on Biological Diversity et al., 2012). Yet another challenge was the difficulty of ensuring that gender experts are available and can participate in the planning phases as well as implementation activities of the CBD (Convention on Biological Diversity et al., 2012).

2.5 Literature Review Conclusion

This chapter provided vital context needed to address the research questions by examining the language around gender in MEAs, major themes and activities of the gender action plans, and the challenges that MEA secretariats face when including a gender lens. This chapter outlined major components of relevance to this thesis: gender conceptualizations and their importance in this research, societal gender dimensions in which to frame the MEA actions and challenges, theories of relevance, a brief background of MEAs and their legal nature, and an overall picture of the status of gender issues and MEAs. The literature review showed that gender equality issues are indeed being talked about in the UN system as well as academic research; however, there is more work to be done to address gender-diversity. The lack of publications relating to the third research question of major challenges to include gender issues in the MEAs from the secretariat perspective confirmed that further research is needed in this area. Relevant theoretical perspectives were presented in this chapter where the GAD framework was a chosen paradigm to focus on relating to the intersectional approach. The next chapter will delve into the research logic and methodological choices taken, in order to address the knowledge gap area surrounding gender equality as it pertains to the realm of international environmental agreements.

3 Methodology

The purpose of this chapter is to describe the design and methodological choices of the research. The chapter begins with a description of epistemological and ontological assumptions which frame the worldview of the researcher. Subsequently, it drills down from a broad, high-level international policy lens and dives into the specific research focus of Multilateral Environmental Agreements (MEAs). A step-by-step process of the research is outlined with the progression of each research question. Lastly, data collection and analysis steps are presented.

This research was guided by a transformative worldview where the focus is to contribute to the scientific discourse of inquiring about social issues of discrimination, power, justice and oppression (Creswell, 2014). The discussion of gender and environment can be viewed as a transformative by helping to find ways to address the major "root causes of inequities, injustice and unsustainable development" (D. M. Hemmati & Bach, 2017). Furthermore, this research was guided by the ontological assumption of bounded relativism acknowledging that there are multiple mental constructions of reality. People may experience very different realities depending on their relationship with gender and gender identity as well as intersectional societal components experienced throughout their life. Furthermore, the researcher acknowledges that the findings of this study may be influenced by the author's personal experience and biases. The author identifies as a cisgender8 woman who has personal, first-hand experience working on toxic chemical reduction programs. Therefore, this topic is highly meaningful to her. This research takes a constructionist epistemological view which implies that social reality is gathered from the participant itself, recognizing that people have very different experiences with gender and gender roles. Acknowledging that there are no larger objective truths as far as gender dimensions, but rather this meaning comes from engaging in each individual's reality (Blaikie & Priest, 2020).

The author's personal interest in this research builds on the feminist methodology which criticizes social and natural science as placing a focus or center on a masculine worldview. (Blaikie & Priest, 2020). In this way of conducting research, it can be argued that "research questions, theories, concepts, methodologies and knowledge claims, which are supposed to be gender free, provide a distorted understanding of both nature and social life and omit or distort women's experiences" (Blaikie & Priest, 2020, p.128). However, the author recognizes that many scientific studies and publications focus on the gender binary, which excludes the experience and attitudes of transgender, non-binary, and gender-queer people. The researcher seeks to expand on this notion of gender binary and include gender diversity in the methodology and worldview.

3.1 Research Design

A qualitative approach was utilized in this research to gain an in-depth understanding of the language used in MEAs as well as the challenges and opportunities faced by secretariats of these international agreements. In this project, there is a specific focus on the chemicals and waste MEAs; however, it was important to include other environmental agreements to compare and contrast such as climate change, biodiversity, and ozone depletion as these areas are often interconnected in a multitude of ways. Comparing and contrasting the concrete inclusions of gender in these agreements provided a compelling platform for presenting conclusions and providing recommendations for further research.

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⁸ "Someone whose gender identity correlates to their birth sex" (A Gender Agenda, 2021).

This research is viewed from an intersectionality lens in two ways. Firstly, examining the gender and environment nexus in order to identify major challenge points to gender equality and environmental sustainability goals. Secondly, acknowledging the worldview that different factors such as race, gender, income level, and others have an impact on how people are affected by inequalities. Throughout the study, the researcher kept in mind that gender inequalities can be viewed as part of larger social inequalities such as wealth, racial and ethnic, and health inequalities. Gender inequalities can be categorized into two dimensions: systemic approaches to change and practical approaches to change. Systemic approaches can refer to laws, policies, and regulations which then can be delineated into the international, national, and local levels of governance. Practical approaches to change to address gender inequalities can include increasing education, awareness raising, and spreading communication of these issues in society. This study recognizes that a combination of methods and tools are needed in order to work towards social equity and equality goals. From the policy angle, this research focuses on MEAs on an international level, and also takes into account the impact and precedent that international agreements can have on subsequent levels of governance such as the national and local level.

The research design was created in two primary workflows in order to address the research questions. Figure 3-1 below depicts the steps taken by the researcher including data sources and analysis technique.

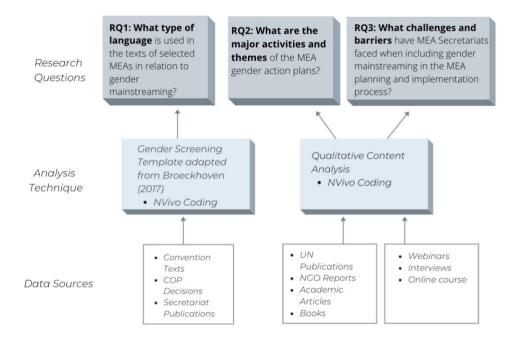


Figure 3-1. Research Steps to Addressing the Research Questions Source: Author's own creation.

In order to address the research aim of addressing barriers to incorporating a gender lens in MEAs, the following research questions are defined below.

RQ1: What type of language is used in the texts of selected MEAs in relation to gender mainstreaming?

The first step to address this question was to collect texts of the conventions to examine where gender is mentioned. This was done using the online United Nations Information Portal on Multilateral Environmental Agreements (InforMEA, n.d.-d) where MEA treaty texts and their

subsequent resolutions and decisions are published. Party information such as national plans and reports submitted to fulfill the MEA requirements is also located on this database.

To gain a clearer idea of where the term gender is mentioned in the UN MEA database as a whole, searching the term 'gender' in the search function under 'all categories' and 'global' resulted in 1,323 results shown in Appendix C. The year range in the search function was from 1995 to 2021, which implied that the first mention of gender was in 1995 and the most recent was 2021. These search results included not only treaty texts, but also communications, global strategy documents, proceedings, publications, and training materials.

To filter and locate specific MEA convention texts which mention gender, a search for 'gender' under the Treaties category filtering for 'global' resulted in 491 results. This can be seen in Table 3-1. This search was from 1995 to 2019, as 2019 was the most recent document uploaded in the database for this category.

Table 3-1. Results for 'gender' in the InforMEA database under Treaties category (1995-2019) including treaty text, related decisions, publications and resources (as of April 29, 2021).

Treaty	Number of results for 'gender'
United Nations Framework Convention on Climate Change	283
Kyoto Protocol to the United Nations Framework Convention on Climate Change	65
Convention on Biological Diversity	54
Paris Agreement to the United Nations Framework Convention on Climate Change	21
Ramsar Convention or Convention on Wetlands of International Importance	19
Stockholm Convention on Persistent Organic Pollutants	13
United Nations Convention to Combat Desertification	11
United Nations Environment Assembly	7
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	5
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	4
Cartagena Protocol on Biosafety to the Convention on Biological Diversity	3
Montreal Protocol on Substances that Deplete the Ozone Layer	2
Convention on International Trade in Endangered Species of Wild Fauna and Flora	1
Nagoya Protocol	1
Vienna Convention for the Protection of the Ozone Layer	1

Source: Author's own creation from InforMEA database search results for 'gender' in Treaties category.

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⁹ 'All categories' includes the following document types: communications, global strategies, others, proceedings, publications, and training materials.

¹⁰ The 'global' specification is chosen to filter out bilateral environmental agreements and country/region specific agreements since the aim of this research was on multilateral environmental agreements.

Once obtaining the bigger picture of gender mentions in the MEA texts, the scope was narrowed down to focus on nine agreements total which are summarized in Table 3-2 below:

Table 3-2. International environmental agreements selected for gender mentions.

Agreement Name Abbreviation & Environmental Category ¹¹		Description of Agreement Goal ¹²		
United Nations Convention on Biological Diversity	CBD - Biological Diversity	Conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising from the use of genetic resources.		
United Nations Framework Convention on Climate Change	UNFCCC - Climate & Atmosphere	Sets an overall framework for intergovernmental efforts to tackle the challenge posed by climate change.		
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal	Basel Convention - Chemicals & Waste	Protect human health and the environment against the adverse effects resulting from the generation, transboundary movements and management of hazardous wastes and other wastes.		
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	Rotterdam Convention - Chemicals & Waste	Promote shared responsibility and cooperative efforts in the international trade and environmentally sound use of certain hazardous chemicals in order to protect human health and the environment from potential harm.		
Stockholm Convention on Persistent Organic Pollutants	Stockholm Convention - Chemicals & Waste	Protect human health and the environment from chemicals that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have adverse effects to human health or to the environment.		
Minamata Convention on Mercury	Minamata Convention – Chemicals & Waste	Protect human health and the environment from the adverse effects of mercury.		
Strategic Approach to International Chemicals Management	SAICM – Chemicals & Waste	Policy framework to promote chemical safety around the world by achieving the sound management of chemicals throughout their life cycle so that, by 2020, chemicals are produced and used in ways that minimize significant adverse impacts on human health and the environment.		
Vienna Convention for the Protection of the Ozone Layer	Vienna Convention - Climate & Atmosphere	Protection of the earth's ozone layer by reducing production and consumption of ozone-depleting substances in order to reduce their abundance in the atmosphere.		
Montreal Protocol on Substances that Deplete the Ozone Layer	Montreal Protocol – Climate & Atmosphere	Protection of the earth's ozone layer by reducing production and consumption of ozone-depleting substances in order to reduce their abundance in the atmosphere.		

Source: Author's own creation detailing descriptions and categories from InforMEA

The author chose chemicals and waste related agreements to meet the chemicals focus of this thesis. However, other environmental agreements on different issues were included in order to

¹¹ Abbreviations and environmental categories are based on the United Nations Information Portal on Multilateral Environmental Agreements at https://www.informea.org/en/treaties/

¹² All descriptions obtained from the United Nations Information Portal on Multilateral Environmental Agreements at https://www.informea.org/en/treaties/

glean a broader view on how gender equality aspects have been included in MEAs as a whole. Moreover, chemicals and waste issues often have interconnections with other environmental challenges, therefore the underlying hypothesis was that gender equality aspects could be applicable across different environmental categories and sectors. For example, toxic pesticides used in agriculture processes can affect the biodiversity of nearby ecosystems. Hazardous chemicals used in refrigerants may have an effect on ozone layer health and therefore climate health. Chemicals in cleaning products may be bioaccumulative and persistent where they can end up in the environment and humans for long periods of time. Additionally, as mentioned in the first chapter, the chemicals sector is much newer in incorporating gender equality aspects and other environmental areas such as biodiversity and climate change have been incorporating for some time.

In relation to the UNFCCC, there is the Kyoto Protocol which set the greenhouse gas emissions targets for parties to meet in the first commitment period. Additionally, the Paris Agreement is a related treaty on climate change which sets goals to limit global warming. These treaties relate to the UNFCCC, however, were not included in the gender template screening process as they both had no direct mention of gender terms included in the treaty text. Similarly, the Cartagena and Nagoya Protocols are linked to the CBD but were not included in the text analysis for the same reasons. The Ramsar Convention on Wetlands of International Importance and UN Convention to Combat Desertification did have publications around gender and women found on InforMEA, however, were not included as the focus was primarily on chemicals and waste agreements with a few select agreements on other environmental issues. UNFCCC was selected because climate change has intersections between many other environmental issues. The Ozone treaties were included to exemplify the connection between ozone depletion and chemicals. Lastly, the CBD agreement was included as it also has many connections with chemicals and waste issues.

The next step in analyzing the agreements listed above in Table 3-2 was to examine how gender was referenced in the agreement text. Each agreement text was uploaded to NVivo software program where a text search was conducted in efforts to locate where gender was mentioned. Then, these mentions were coded and analyzed using the gender screening template adapted from Broeckhoven's (2017) gender template, see Table 2-3, which categorizes actions by more aspirational or action-oriented terminology, amongst other terminology specifications. After gathering where gender is mentioned in the convention texts, an analysis of the MEA gender action plans was undertaken in order to address RQ2:

RQ2: What are the major activities and themes of the MEA gender action plans?

The first step to address RQ2 was to locate the gender action plans of the MEAs in this project. When searching the UNEP webpage InforMEA and the convention secretariat separate webpages, the following four gender action plans were located as detailed in Table 3-3.

Table 3-3. MEAs and their gender action plans.

Treaty	Gender Plan Title	Date Established	Date Updated
Basel Convention Rotterdam Convention Stockholm Convention	Gender Action Plan of the Secretariat of the Basel, Rotterdam and Stockholm Conventions (BRS-GAP)	December 2013	March 2019
Convention on Biological Diversity	Decision Adopted by the Conference of the Parties to the Convention on Biological Diversity. XII/7. Mainstreaming gender considerations	October 2014	N/A
Minamata Convention	Overview of the activities planned under the Minamata Convention in 2020-2021Prepared by the Secretariat based on COP-3 document UNEP/MC/COP.3/INF/9 and COP-3 decisions	May 2020	N/A
UN Framework Convention on Climate Change	Conference of the Parties 25th session Agenda Item 13. Enhanced Lima work programme on gender and its gender action plan	December 2014	December 2019

Source: Author's own creation from searching the InforMEA databases and convention secretariat webpages

Some of the conventions have established gender action plans in years prior which have since been updated. The BRS Gender Action Plan and the UNFCCC Enhanced Lima work program included subsequent revisions. This analysis utilized only the most up-to-date version of the gender action. If there was only a draft version available, that document was analyzed as part of the research, acknowledging that it was a draft document and not a policy mandate which parties had ratified. The only draft plan was the Minamata Convention where the COP decision outlines activities planned, but a formal gender action plan is still in process at this time.

The approach taken to analyze the gender action plans included a literature review from which to delineate the major activities and themes. These major activities and themes were categorized into two groups: activities within the secretariat and activities outside the secretariat. Many of the activities were relevant to both of the groups. A list of the major activities can be found below in Table 3-4 and is further explained in Chapter 4 Results.

Table 3-4. Major themes and activities found from the gender action plan analysis

Both Within the Secretariat and Outside the Secretariat	Specifically Within the Secretariat		
 Gender Equality Perspective Baseline & Reporting Capacity & Decision Making Communication & Awareness Funding & Resources Effectiveness of MEA Data & Case Studies Linkages to Social and Environmental Issues Gender-/Sex-Disaggregated Data Gender Parity Implementation Stakeholder Collaboration 	 Updateability of Gender Action Plan Action Plan Accountability Gender Team Within Secretariat Secretariat Staff Understanding Collaboration Within the UN System Larger UNEP Gender Task Team 		

Source: Author's own creation.

This work led up to the next step which comprised an examination of the gender inclusions historical background within MEAs and a comparison of the major themes from the gender action plans withing the context of the lived experience of the secretariats. This led to the following research question:

RQ3: What challenges and barriers have MEA Secretariats faced when including gender mainstreaming in the MEA planning and implementation process?

To address this research question, the author conducted an online review of available literature and publications relating to major activities and challenges of secretariats regarding gender. Since there were only a few documents found, a triangulation of data was needed to address this research question. To gain a more in-depth picture of how and why gender aspects have been included in the specified agreements, qualitative interviews were conducted with one to two members of each convention's secretariat. Qualitative interviewing typically consists of a researcher "asking questions and prompting conversation in order to gain information and understanding of social phenomena and attitudes" (Walliman, 2006, p.131). Interviewees were chosen strategically to identify someone who has worked around gender issues in the MEA. The next section describes how data was collected for this project.

3.2 Data Collection

For data collection, this research project utilized online documents as well as interviews to gain an overall perspective of gender equality issues in the MEA process. The data sources include six MEA secretariat semi-structured interviews, 13 informal semi-structured stakeholder conversations, a literature review consisting of 16 academic articles, 7 books, 49 United Nations publications (including 9 treaty texts and 4 gender action plans), 14 NGO/intergovernmental publications, and six webinars and one online course. The online data sources, interviews, and informal conversations served as a way to triangulate the data. In order to obtain a more comprehensive picture of MEA gender mainstreaming work.

3.2.1 Literature Review

The aim of the literature review was to gather and analyze academic and grey publications in a systematic way, in order to increase understanding of the research questions and the major interconnections between gender equality and environmental issues. Literature was gathered from a variety of online and physical sources consisting of intergovernmental agency reports, policy recommendation papers, UN publications, NGO publications, academic journal articles and books.

To gather online data for the desktop research, search terms were inputted in a variety of online platforms including Google, LUB Search, Google Scholar, and Science Direct (detailed search pathways can be found in Appendix A). This online search yielded a large number of results, and only the most relevant documents were chosen after scanning the title, abstract, and key words. Additionally, each convention secretariat webpage was surveyed for relevant reports and publications. Finally, further readings were suggested from interviewees, peers, and supervisors. This method of 'snowballing', or gathering information through social networks (Blaikie & Priest, 2020), proved helpful in the early stages of the research and provided a means to focus in on the primary focus area. As a snowball grows in size the more it is rolled, the understanding of the research area and potential questions grew as well after speaking with each stakeholder. The literature review assisted in the development of the framework of analysis of this research in two ways. One was in answering RQ1 using an adapted version of Broeckhoven's (2017) gender template and the second was using online publications which provided a background of

key concepts pertaining to this research area and addressed challenges that MEA secretariats faced.

3.2.2 Informal Talks with Stakeholder Perspectives, Online Courses, and Webinars

Many stakeholders participate in the MEA planning, negotiation, and implementation process. For exmaple, the NGO community has historically been involved in the negotiations of MEAs and in their subsequent Conference of the Parties meetings (Broeckhoven, 2017). In MEA creation and negotiations, scientific advisory bodies and academia are influential in providing consultative guidance to policymakers as well as in the monitoring of targets and indicators (Allan et al., 2021). This research benefitted from learning directly and indirectly from these practitioners and stakeholders. Thirteen people participated in semi-structured informal conversations. These conversations included a variety of key stakeholders in this research area including three people from Non-Governmental Organizations (NGOs), three people from academia, four people within the UN system working on gender, two intergovernmental agencies, and one national environment ministry. During these conversations, stakeholders also recommended additional contacts. These conversations were not transcribed and analyzed. But helped in narrowing down the focus of the research and getting confirmation that the research questions and aim were relevant.

Some examples of organizations who participated in these discussions were; the International Labour Organization (ILO), Swedish Ministry of Environment, UNEP Gender Focal Points, Swedish International Development Cooperation Agency. Additionally, NGOs working on gender and environmental governance issues provided valuable insights. Those included were the Multi Stakeholder Processes for Sustainable Development (MSP) Institute, Health and Environmental Justice Support (HEJSupport), and International Pollutants Elimination Network (IPEN). Furthermore, the perspectives from academia provided critical insight in defining the theoritcal framework for this research. Discussions were held with an environmental health professor at the School of Public Health and Family Medicine at the University of Cape Town, and a previous researcher at Ghent University who studied gender equality integrations in three specific MEAs. This research focused on the secretariat angle and MEAs, but also benefitted from the insights and learnings from other stakeholders in this area.

Other tools used to supplement desk research and interviews were publicly available online webinars as well as courses. The webinar series titled "45 Min for Gender: Webinar Series on Gender Equality and Future Chemicals Management" delivered relevant information and also helped identify stakeholders to contact for interviews and informal conversations. Six total webinars were released in 2020 and reviewed for this project. The MSP Institute, a nonprofit in Germany working on Multi Stakeholder Processes for Sustainable Development, produced the ongoing webinar series which "aims to explore gender equality and its interconnection to the world of chemistry, where expert practitioners share and discuss gender-responsive frameworks for the sound management of waste and chemicals" and is ongoing into 2021 to continue to explore gender and chemicals issues (MSP Institute, 2020a). In addition to the webinar series, the author completed a free open online course on Gender and Environment. This six-hour self-paced learning course was provided by the UN with development from secretariats involved with various MEAs including climate and chemicals focused conventions. The course content proved to be highly relevant for this research by conveying perspective on where the UN stands on their gender and environment agenda.

3.2.2.1 MEA Secretariat Interviews

The second stage focused on garnering a stakeholder perspective via interviews with MEA secretariats, in order to gain an understanding of the major challenges of incorporating gender issues in MEAs which work on climate change, biodiversity, ozone depletion, and chemicals and waste. Members of the secretariat who had specific experience working on gender equality were contacted. These interviews provided direct insight on the challenges and barriers when designing gender strategies in these conventions as well as gaining insights on the historical processes regarding gender mainstreaming. Interviews were conducted with the secretariat from each of the MEA categories with the exception of UNFCCC as they did not have the capacity to participate in an interview for this project. One person was interviewed from the BRS Conventions secretariat as they are merged as one, and one person from the Montreal Protocol and Vienna Convention was interviewed as their secretariets are also merged. Two people from the Minamata Convention were able to be interviewed as they provided different backgrounds with their specific work on gender in the convention. One person in the secretariat of the Convention on Biological Diversity and SAICM agreed to be interviewed for this project.

Semi-structured interviews included a standardized set of questions, but also provided a forum to synthesize emerging themes and ideas which were not directly found in the literature review. Interviews began with confirmation of consent to record, a brief introduction of the purpose of the study, standardized questions from the interview guide (Appendix B) and progressed with follow-up questions for additional context, detail, or clarifications. This type of interview facilitated a broad understanding of the stakeholder's work and experience in the research area. All interviews were conducted remotely, via the Lund University Zoom platform, due to the international nature of the secretariats as well as COVID-19 rules that restricted travel. Each interview was recorded with permission of the interviewee and then transcribed. Then, the transcription was sent to the interviewee to verify if there were any misinterpretations or updates needed.

3.3 Data Analysis

The method for analyzing the practitioner aspect of this study used a qualitative content analysis (QCA) framework as described by Roller (2019). In short, this method analyzes content (data including a variety of sources such as audio, video, etc.) to look for themes and different interpretations of the data (Roller, 2019). In QCA methods of this study, there was a level of distance from the participants in some cases (listening to previously recorded webinars and online course), whereas the webinar was listened to after it was recorded. Therefore, the researcher did not actively participate to avoid influencing any outcomes. In analyzing the empirical elements of this study, an inductive approach was utilized. Overarching key activities and themes found in the academic literature review and review of the gender action plans were identified and compared with the stakeholder interviewees perspective. From this process some new themes emerged.

Literature gathered from the desktop study was analyzed first by scanning the document for relevance to the research, then secondly coding sources into a synthesis matrix highlighting the thematic issues, theoretical frameworks, and key problems addressed in each resource. Interviews were recorded and transcribed then read in detail to determine any emerging themes and topics which arose. Key themes and takeaways were used to compare against the literature review to deduce similarities and differences. Analysis steps included triangulation of the data in examining what were the major challenges to implementation of the gender aspect in the agreement and what opportunities exist going forward.

3.3.1 Content Analysis with NVivo

The qualitative research coding software NVivo was utilized to complete the QCA steps of analyzing data from the interviews, MEA texts, and gender action plans. Codes or labels are utilized to delineate units of meaning to the data that was collected (Walliman, 2006). In another perspective, qualitative codes are viewed as "essence-capturing and essential elements of the research story that, when clustered together according to similarity and regularity (i.e., a pattern), actively facilitate the development of categories and this analysis of their connections" (Saldana, 2015, p.9). Coding as a method for data analysis was chosen in order to organize the large amount of data collected in a systematic way.

The three research questions and how the data was analyzed is as follows:

RQ1: MEA texts were examined against gender screening template adapted from Broeckhoven's (2017) Gender Template (Table 2-3). Outcomes stemming from this analysis are presented in a table and bar graph with detailed findings following the figures.

RQ2: an in-depth examination of the agreement's gender action plan (or convention's planned activities around gender) was completed in order to categorize and group the main themes and key components of the action plans. The coding journal can be found in Table 4-2. Outcomes of this analysis is presented in bar graphs as well.

RQ3: explores what challenges and barriers MEA secretariats have faced when including gender equality aspects in the agreements. The secretariat interviews were coded using the same codes used to categorize the gender action plans (Table 4-2) with additional concepts added around gender diversity and perceptions of gender included. These codes were developed from delineating patterns in the literature review specifically looking at published UN documents which described the MEA actions around gender equality. Finally, outcomes of the analysis of RQ3 are presented in bar graphs and textual explanation.

This coding framework was iterative, in the way that codes found to be repetitive or very similar in nature were merged into one. If a gender reference also mentioned links to social issues or environmental issues (an intersectional approach), then this was coded as 'linkages to social and environmental issues'. On the other hand, if gender references around data collection specifically referred to sex- and gender-disaggregated data, this was coded separately in order to highlight the specificity of this type of data collection from general need for more data. Annotations were made on each interview transcription to keep track of important or unique findings. The results are presented in hierarchy charts and bar graphs to show the whole picture of how some references came up more than others.

4 Results

Results from the data collection and qualitative content analysis with NVivo are presented in three parts. First, relating to Research Question 1 (RQ1), results from examining the actual text of the Multilateral Environmental Agreements (MEAs) are presented looking specifically at the terminology used in mentions of gender equality aspects. Results and analysis from reviewing the agreements' related gender action plan are presented next to address RQ2. Finally, RQ3 results from the MEA secretariat interviews are reviewed against the themes used in the gender action plan analysis and those found in the literature review.

4.1 MEA Text Language Assessment Results

4.1.1 Gender Terms in MEA Texts

A term search was carried out on NVivo, in order to understand the frequency of gender (and correlating terms) mentions within the convention texts. In each treaty text, a search for the terms; 'gender', 'women', 'woman', 'female', 'men', 'man', 'male', and 'sex' was conducted. The terms 'female', 'male', and 'sex' did not occur any times in the texts other than 'sex' used in the Latin numerical format in the Minamata Convention on Mercury text. The results are presented in Table 4-1 below.

	Table 4-1. Search results	for the terms:	'gender'.	'women'.	'woman'.	'men'.	'man	' in all MEA texts.
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Search Term/ Treaty Text	Gender	Women	Woman	Men	Man	Total Count*
CBD	1	2	0	0	0	2
UNFCCC	0	0	0	0	0	0
Basel Convention	0	0	0	0	2	0
Rotterdam Convention	0	0	0	0	0	0
Stockholm Convention	2	3	0	0	0	3
Minamata Convention	1	3	0	0	0	3
SAICM	0	17	0	0	0	17
Montreal Protocol	0	0	0	0	0	0
Vienna Convention	0	0	0	0	1	0

^{*}Note: Total counts for the CBD, Stockholm, and Minamata treaties are lower because each mention of gender was in the sidebar, not in the actual text. Additionally, in the Basel Convention and Vienna Convention, both mentions of 'man' were not included as part of the total because they were not concerning gender. They were related to 'man-kind'.

Source: Author's own creation.

The terms listed above were mentioned in a total of twenty-five separate times across the nine convention texts analyzed. None of the search terms came up in the United Nations Framework Convention on Climate Change (UNFCCC), Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (Rotterdam Convention), or Montreal Protocol on Substances that Deplete the Ozone Layer

(Montreal Protocol). Therefore, no further coding was implemented in these agreements. Additionally, the term 'gender' did produce search results, but only listed as a sidebar, not directly in the text of the convention. The MEA texts contained a sidebar of general terms to which each section of the treaty could be related (see example in Appendix D). Other than 'gender', other term includes 'precautionary principle', 'Indigenous Peoples', 'conservation', 'international cooperation', 'financial mechanism', etc. The treaty texts list these terms of relevance, to make searching for specific topics within the agreement easier. Thus, the total count did not include these mentions, since they were not directly within the convention text.

In the Convention on Biological Diversity (CBD) text, 'women' is found twice in the preamble referring to the "vital role that women play in the conservation and sustainable use of biological diversity and affirming the need for the full participation of women at all levels of policy-making and implementation for biological diversity conservation". Keeping in mind that both mentions are in the preamble section of the text.

In the Basel Convention, the term 'man' is found twice. Once in Annex III List of Hazardous Characteristics where it is stated that "Further research is necessary in order to develop means to characterize potential hazards posed to man and/or the environment by these wastes". Additionally, Annex IX List B describes wastes with certain characteristics with man-made fibers. Both of these cases are not directly related to the gender discussion and are not included in the total but are noted as gendered language in the text.

In the Stockholm Convention, 'women' is mentioned three times. Once in the preamble where it is stated that the parties to the convention are "aware of the health concerns, especially in developing countries, resulting from local exposure to persistent organic pollutants, in particular impacts upon women and, through them future generations". In the operative text, Article 7 on implementation plans requires that each party "shall, where appropriate, cooperate directly or through global, regional and subregional organizations, and consult their national stakeholders, including women's groups and groups involved in the health of children, in order to facilitate the development, implementation and updating of their implementation plans". The last mention of 'women' in this text is in Article 10 on public information, awareness, and education where it is stated that "each party shall, within its capabilities, promote and facilitate development and implementation especially for women, children, and the least educated, of educational and public awareness programmes on persistent organic pollutants as well as on their health and environmental effects and on their alternatives".

In the Minamata Convention, 'women' is included three times – once in the preamble and twice in the operative text. In the preamble, it is noted that parties to the convention are "aware of the health concerns, especially in developing countries, resulting from exposure to mercury of vulnerable populations, especially women, children, and, through them, future generations". The next two mentions are in Annex C which mandates what parties must include in their Artisanal and small-scale gold mining National Action Plans. Section (i) states that "strategies to prevent the exposure of vulnerable populations, particularly children and women of child-bearing age, especially pregnant women, to mercury used in artisanal and small-scale gold mining" must be included in the National Action Plans. Noting that the last two mentions are in the operative text which sets mandates for parties to meet. The term 'gender' was found not part of the text but as a sidebar in which each section is tagged by its major themes. In this case, it was part of the preamble mention of 'women' and therefore not counted as part of the total number.

In the SAICM 2006 texts, which also include resolutions of the International Conference on Chemicals Management, 'women' was located seventeen different times. Once in the Dubai

Declaration on International Chemicals Management, five times in the Overarching Policy Strategy, and twelve times in the Global Plan of Action section. Lastly, the Vienna Convention had one mention of the term 'man' in the operative text. However, this was referring to 'manmade' and not gender and was not included in the total count of twenty-five mentions around gender.

4.1.2 Gender Template Screening

Once locating where gender terms were throughout the MEA texts, each reference was highlighted and coded using the gender screening template (detailed in Table 2-3) adapted from Broeckhovhen's (2017) report. In addition, each reference was coded as part of the preamble or the operative section of the text. SAICM is not an MEA, but rather a global framework and does not have a preamble or operative section of the text. Some references mentioned 'women' twice or were tagged with multiple codes if the reference applied to more than one code. MEA terminology totals can be viewed in the bar graph below (Figure 4-1).

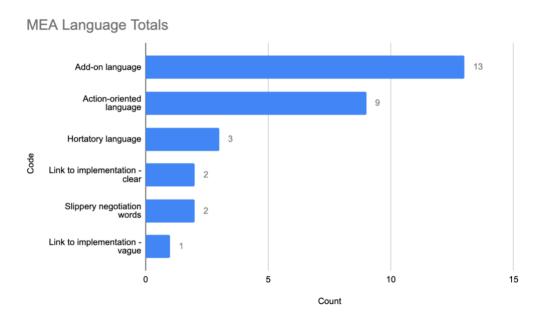


Figure 4-1. Gender screening template codes found across nine convention texts examined. Source: Author's own creation.

Across the nine MEA texts examined, add-on language, or women mentioned as part of a list, was the most commonly coded in the texts with a total of thirteen mentions. Add-on language was found twice in both the Minamata and Stockholm Conventions and nine times in the SAICM text. In Minamata, Part II Annex C (within the operative part of the text) states in regard to National Action Plans, parties should include "strategies to prevent exposure of vulnerable populations, particularly children and women of child-bearing age, especially pregnant women, to mercury used in artisanal and small-scale gold mining". The add-on language found in the Stockholm Convention preamble where it is stated that parties are "aware of the health concerns, especially in developing countries, resulting from local exposure to persistent organic pollutants, in particular impacts upon women and, through them, upon future generations". In the SAICM text, add-on language is often mentioned when calling out women as a specific group whether in equal participation or exposure of chemicals and risk reduction. In three cases, women are called out as part of a list of vulnerable groups including children, the elderly, the poor, and workers. In five cases, women's participation by all sectors of civil society, particularly

women, workers, and Indigenous communities, in regulatory and other decision-making processes that relate to chemical safety".

Action-oriented language was also found in significant proportions however only in the SAICM framework. Action-oriented language was only coded when there were no slippery negotiation words included in the reference. For example, in the Stockholm Convention, it says "The Parties shall, where appropriate, cooperate directly or through global, regional, and subregional organizations and consult their national stakeholders, including women's groups [...]". Usage of 'shall' is a strong link to action, but the inclusion of 'where appropriate' increases the ambiguity of the statement, and therefore was not coded as action-oriented language. In the SAICM text, mentions of women are often as add-on language as discussed in the previous paragraph, however, in these cases, there was also clear action-oriented language. For example, "to ensure equal participation of women in decision-making on chemicals policy and management" and "to promote and support meaningful and active participation by all sectors of civil society, particularly women, workers [...]" where there is a clear link to action.

Slippery negotiation words were found only in the Stockholm Convention. Once mentioned in the part explained in the above paragraph around the use of 'where appropriate' and the other in Article 10/1(c) stating "Each Party shall, within its capabilities, promote and facilitate development and implementation especially for women, children and the least educated, or educational and public awareness programmes on persistent organic pollutants [...]". The 'within its capabilities' was found to be a slippery mention whereas this can be interpreted by parties that they should only undertake this activity if they have the capability – it is highly subjective.

Hortatory language was found in three convention texts, each in the preamble section. The Minamata Convention and Stockholm Convention have the exact same phrasing: "Aware of the health concerns, especially in developing countries, resulting from local exposure to persistent organic pollutants, in particular upon women and, through them, upon future generations". The Minamata convention replaces 'persistent organic pollutants' with 'exposure to mercury' and also mentions vulnerable populations and children in this reference. In the CBD text, it's stated that the Parties are "Recognizing also the vital role that women play in the conservation and sustainable use of biological diversity".

Lastly, looking at the **links to implementation** there were two references of clear linkages to implementation. In the Minamata text, strategies in mercury prevention to vulnerable populations (including women of child-bearing age and children) are clearly presented in instructions for parties' Artisanal and small-scale gold mining National Action Plans in the operative part of the convention text. In the SAICM text's Governance section, it states that a goal is "to ensure equal participation of women in decision-making on chemicals policy and management". This is a clear gender parity link to the implementation of the SAICM objectives. However, noting that the SAICM framework is not legally binding. On the other hand, there was one vague link to implementation in the Stockholm text which overlaps with the slippery language used. In Article 10/1(c) the operative section on implementation plans states that parties should cooperate and consult their national stakeholders when updating their implementation plans. This reference was found to be vague as there can be different interpretations of the words 'cooperate' and 'consult' when working with organizations. It does not highlight what level of cooperation or consultation should be achieved.

4.2 Gender Action Plan Assessment Results

RQ2 examines the MEA gender action plans to gather major activities and themes. This section details the results of four gender action plans reviewed for this analysis (see Table 3-3 for specifics):

- 1. Basel, Rotterdam, and Stockholm Convention (BRS)
- 2. Convention on Biological Diversity (CBD)
- 3. Minamata Convention
- 4. UN Framework Convention on Climate Change (UNFCCC)

Noting that the Minamata Convention document is an overview of the activities planned under the Convention in 2020-2021, this document outlines all activities planned and some incorporate gender mainstreaming in the considerations. The CBD and UNFCCC documents are decisions adopted by the Conference of the Parties (COP) in each convention. The CBD Gender Plan of Action reviewed is the 2014 version, which includes the 2015-2020 Gender Plan of Action. A new draft outline of the post-2020 Gender Plan of Action was published for comments by parties on the webpage in 2021, however this document was not analyzed since it is currently in draft form. Lastly, the BRS Gender Action Plan was a document produced from the decisions of the 2017 COP where parties welcomed the secretariat to create the gender action plan. Major activities and themes found in the gender action plans are summarized below in the Coding journal (Table 4-2). Each activity or theme (code) is listed along with a description.

Table 4-2. Coding journal of major activities/themes found in gender action plans.

Gender Action Plan Activities & Themes	Description
Accountability	Including elements of the gender action plan which increase transparency and provide accountability measures.
Baseline & Reporting Progress	Developing a baseline on gender-related issues within the secretariat or in projects and programs. Reporting through measurement and communication of indicators and actions.
Capacity Building & Decision Making	Including equitable involvement in decision-making processes, technical assistance in program development, and knowledge-building, skill development, and training opportunities.
Communication & Awareness Raising	Tools and actions to facilitate information exchange on the work addressing gender equality within the secretariat, parties of the convention, and/or other related stakeholders and the general public.
Data Collection & Case Studies	Collection of case studies, best practices, monitoring and evaluation of gender mainstreaming indicators, pilot projects.
Effectiveness of MEA	Refers to gender mainstreaming efforts as a way to increasing the effectiveness of the MEA. Acknowledging the need for gender mainstreaming in relevant targets and goals in activities under the agreement as a significant contribution in increasing the effectiveness.
Gender Parity	Looking at the gender make-up of secretariats, negotiations, etc. Encouraging equality of women and men participation and promoting women leadership.

Gender/Sex Disaggregated Data	Collection of data with specific indicators of the gender or sex of the subject.
Gender Team Within Secretariat	Designated body or group of people working to support gender mainstreaming and a gender action plan within the convention. Also referred to as gender task force.
Implementation	Activities planned or undertaken by secretariat or parties surrounding gender plan of action.
UN System Collaboration	Working with other UN agencies/bodies such as UN Women, other MEAs, and their gender focal points. Taking into consideration other MEA secretariat approaches and gender action plans as far as strategies and content. Including other international agreements concerning gender.
Funding & Resources	Relating to budgeting of resources to facilitate activities within secretariat or directly to parties. Often referring to UN funding schemes such as the Global Environment Facility and Multilateral Fund.
Larger UNEP Gender Task Team	Interagency team within UNEP working on gender equality issues in the MEAs.
Secretariat Staff Understanding	Developing training and understanding from secretariat staff on the issue of gender equality, framework for integrating a gender perspective within the work of the secretariat. Including staff well-being.
Stakeholder Collaboration	Cooperation with other partners on gender-related activities. For example, working with NGOs, organizations within the UN system such as UN Women and UNDP, Indigenous and local community experts on gender mainstreaming, and other international organizations or regional networks.
Updatability	Refers to how the gender action plan is reviewed and updated periodically. For example, setting dates when the plan shall be assessed and updated with any achievements, proposals for new actions, etc.
Gender Equality Perspective	Broad reference to a gender equality perspective including gender equality principles, perceptions, and gender lens.
Linkages to Social and Environmental Issues	Refers to intersectional elements (broader social aspects) related to the area which the agreement addresses.

Source: Author's own creation.

Each of the four gender action plans was coded using NVivo software. A step-by-step description of the coding process can be found in the Data Analysis section of Chapter 3. A bar graph of the total code count references from the gender action plan analysis is presented below in Figure 4-2.

Gender Action Plan Findings

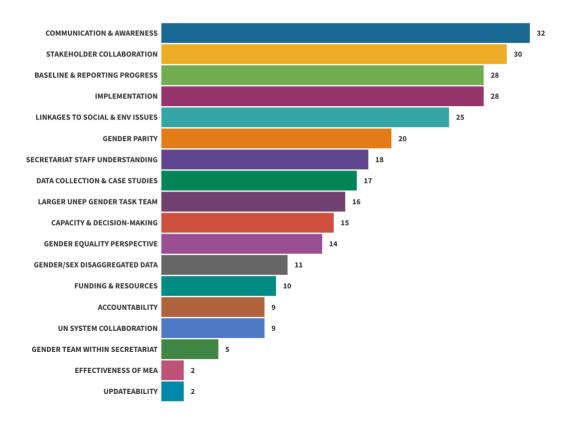


Figure 4-2. Bar Graph Analysis of Gender Action Plan Findings Source: Author's own creation.

Looking at the picture of all code references in all of the gender action plans (Figure 4-2), the top five most referenced activities were communication and awareness (32), stakeholder collaboration (30), baseline and reporting progress (28), implementation (28), and linkages to social and environmental issues (25). These top five references represent nearly half of the total gender action plan references.

4.2.1 Gender Action Plan Findings

In comparing and contrasting the four different gender action plans of the BRS, CBD, Minamata, and UNFCCC gender action plans, they varied in length and detail. The CBD plan had by far the most amount of coding references at 136, while the UNFCCC and Minamata had respectively 44 and 52 references. The BRS contained the least references at 30. Total references in the gender action plans are summarized below in Figure 4-3.

Convention on Biological Diversity Gender Plan of Action Overview of the activities planned under the Minamata Convention in 2020-2021 UNFCCC Enhanced Lima work programme on gender and its gender action plan Gender Action Plan of the Secretariat of the Basel, Rotterdam and Stockholm conventions 0 50 100 150 References

Figure 4-3 Total Coding References Across Gender Action Plans Source: Author's own creation.

Each of the gender action plans reviewed in this research found that plans specify actions or recommendations that parties can take at the country level and the secretariat level and are discussed separately in the following two sections.

4.2.1.1 Major Activities Within the Secretariat

This section describes the major activities found that was in relation to the MEA secretariats. Some action plans described establishing a **gender team within the MEA secretariat**. For instance, the BRS secretariat formed a gender task team in 2012 to develop approaches to gender mainstreaming and develop targets within the secretariat (Secretariat of the BRS Conventions, n.d.-a). In the CBD Gender Plan of Action, there is a full-time gender program officer within the Secretariat who is responsible to lead a gender task force amongst other activities around gender mainstreaming.

The BRS and CBD documents point to liaising and collaborating with the larger UNEP Gender Task Team. This team was established in 2012 and works on a variety of policy issues and recommends direction for the UNEP Gender Programme. Additionally, the CBD plan mentions that the secretariat should take stock of relevant partners to identify areas of collaboration; however, they should strive to avoid duplication of efforts or overlap work. Besides collaboration with the UNEP Gender Task Team, other collaborations within the UN system are mentioned. For example, the UNFCCC plan points to participation in "the United Nations System-Wide Action Plan on Gender Equality and the Empowerment of Women (UN-SWAP) to strengthen the integration of gender considerations within the organization and work of the secretariat". The CBD plan recommends developing synergies and a common knowledge base between the various environmental agreements. Similarly, the Minamata plan suggested collaborating with other conventions in the chemicals and waste cluster in order to increase gender mainstreaming.

Secretariat staff understanding is highlighted as a key action item in each of the gender action plans reviewed. Staff understanding can refer to comprehending gender concepts, skill-development, and training on gender-related issues, helping staff to integrate gender considerations in their work, etc. For example, the BRS plan states that one objective is to develop secretariat staff understanding and support on a gender perspective throughout their

activities and operations. Additionally, supporting staff well-being by helping staff achieve a sustainable work-life balance is also mentioned as part of this action plan. The CBD plan mentions that a designated gender program officer will conduct a gender-sensitivity training to the secretariat. The Minamata plan points out that the secretariat should build on the expertise of the BRS gender mainstreaming efforts and to learn from their work.

The statistical makeup of men and women in a body, or **gender parity**, is something that is brought up in each of the gender action plans analyzed. The BRS plan mentions that "gender is relevant in the composition of the conventions' bodies" and the Minamata plan says the secretariat will "encourage a balanced gender representation within the delegations" as well as during officer elections. As far as reporting on gender parity, the UNFCCC plan stated that the secretariat is responsible for preparing a yearly gender composition report as well as a biennial synthesis report on the secretariat's progress in integrating a gender lens in their work. Additionally, the CBD plan states that the secretariat can conduct gender monitoring and evaluation by compiling the gender makeup of past meeting participants.

Gender mainstreaming as a way to increase the **effectiveness of the MEA** is brought up in the CBD and UNFCCC plans. The latter states that the parties acknowledge the importance of gender mainstreaming work within goals and targets of the Convention that will ultimately increase the effectiveness of the Convention. The CBD plan Annex states that one of the main objectives of the plan is to increase the effectiveness of the work under the convention.

Updateability of the gender action plans is mentioned in the BRS plan where it should be "reviewed and periodically updated to review its objectives, assess any achievements and to propose new actions as appropriate." The UNFCCC document states that the plan is to review and update the plan in 2022 and 2024. The CBD and Minamata did not mention any explicit references to plan updateability. In relation to updateability, **baseline and reporting progress** comes into play in some of the gender action plans. Both the Minamata and the BRS plans state that a baseline on gender-related issues within the secretariat should be developed to measure progress in working towards meeting the plan's activities and objectives.

Funding and resources were discussed in the CBD plan of action. It asserts that the secretariat should fully include a specific budget line item that allocates funding towards the implementation of the plan of action. In the Minamata plan Legal and Policy Activities section, budgeting activities must link with gender mainstreaming work, and outcomes are dependent on "the availability of timely and adequate funding". In the UNFCCC plan, the secretariat "takes note of the estimated budgetary implications of the activities to be undertaken" and that actions of the secretariat are subject to resource availability. The CBD plan mentions how the secretariat should look to support technical advice efforts as well as scientific information and knowledge sharing. The other plans focus primarily on funding and budget allocations of secretariat actions.

Communication and awareness aspects are considered in all four gender action plans. The CBD plan documents that a clearing-house mechanism will be created to share information on best practices as well as assisting parties. The Organizational sphere section of the CBD plan calls for the body within the secretariat which supports gender mainstreaming efforts to include awareness and training as part of its responsibilities. The Minamata secretariat notes the development and implementation of gender trainings to support parties in their implementation of the convention. Means of verification are listed such as producing workshop reports, notes from training sessions, and survey questionnaires. Lastly, the UNFCCC plan notes that it seeks to increase information-sharing and communication activities through online resources.

To address action plan **accountability**, a responsibility of the secretariat in the CBD plan is to facilitate an ongoing discussion with parties regarding gender mainstreaming around the Sustainable Development Goals (SDGs) and the Aichi Biodiversity Targets¹³. Additionally, the CBD secretariat is recommended to provide updates on their gender mainstreaming work as well as undertaking an annual audit when possible. Similarly, the BRS plan highlights specific short, medium, and long-term goals including monitoring and reporting on these goals. This aims to ensure accountability within the secretariat in order to create transparency. The plan also highlights the need to ensure accountability within the secretariat's internal operations as well as all programmatic gender mainstreaming executed activities. The Minamata plan identifies a variety of accountability controls for verifying gender mainstreaming work: training program and training concept notes, workshop reports, and survey questions are made public as well as reported to the COP meetings and production of a gender strategy report.

The Minamata and UNFCCC plans both highlight the importance of **capacity building & decision making** within the secretariat. The Minamata plan speaks to capacity building of gender issues within the secretariat's projects and programs as well as the benefits of cooperating with other stakeholders. Similarly, UNFCCC highlights the need to provide support to secretariat staff and related bodies on capacity building support and integrating a gender perspective. Capacity building within the secretariat activities is not mentioned in the BRS or CBD plans; however, they both mention it in relation to parties' actions.

Recognition of a **gender equality perspective** is highlighted throughout the gender action plans. For example, the Minamata as well as the BRS plan state that they "will ensure that the secretariat's programmes and projects are planned and implemented from a gender equality perspective". The BRS plan is unique in that it calls out the need for gender equality within human resources management in the secretariat. The UNFCCC plan is supportive of secretariat staff to integrate a gender perspective into their work as well as sets forth a requirement to produce a biennial report to synthesize progress on the gender perspective implementation. Many of the mentions of a gender equality perspective in the CBD plan relate to the plan's strategic objectives. For example, "to mainstream a gender perspective into the implementation of the Convention and the associated work of Parties and the Secretariat".

4.2.1.2 Major Activities Outside the Secretariat

Major activities identified outside the secretariat often refer to additional parties or other stakeholders. **Implementation** activities of the gender action plan are a key theme throughout each of the four plans assessed. The CBD plan has a section devoted to possible actions by parties some of which include mainstreaming gender into the party national biodiversity strategies and action plans. It suggests utilizing gender experts to review the gender sensitivity of the action plans and ensuring there is political will for gender mainstreaming in implementation activities of the convention. The UNFCCC refers to coherence with the UN 2030 Agenda for Sustainable Development in contributing to "improving the efficiency and effectiveness of efforts to integrate gender considerations into climate action". It highlights that increased gender-responsive implementation of climate policy can raise the ambition of parties to the convention and in turn work towards a just transition and increased gender equality. The BRS plan also noted that "gender issues related to the implementation of the conventions have also been discussed and taken into account by the Conference of the Parties, particularly the

¹³ The twenty Aichi Biodiversity Targets are a series of strategic goals with target indicators which create a framework for CBD parties to take into account and report on in their National Biodiversity Strategy and Action Plans as well as report on in the COP meetings (Convention on Biological Diversity, 2018).

impact of poor management of hazardous chemicals and wastes on vulnerable groups such as women and young children".

Stakeholder collaboration is another key action mentioned in the gender action plans featured most prominently in the CBD and Minamata plans. The CBD plan specifically highlights the importance of collaboration with Indigenous and local community experts on diversity and gender mainstreaming. It recognizes the need to "identify the importance of traditional knowledge and customary practice held by men and women in the protection of biodiversity and make use of them in supporting the implementation of national biodiversity strategies and action plans". An additional mention underscores engaging women's groups working in the areas of agriculture, forestry, and fisheries. Parties are encouraged to collaborate with NGOs, academic institutions, intergovernmental organizations, and other civil society actors. The UNFCCC echoes the benefits of collaboration with these external entities to support the gender action plan. The Minamata plan highlights that programming and cooperation on gender issues with internal and external partners should be done on regional, national, and international levels, in order to realize the plan's goals and objectives. A multi-stakeholder approach is also emphasized throughout the Minamata gender action plan.

The collection of data and case studies is a key element highlighted across the gender action plans. The BRS plan brings up pilot projects as a way to build gender mainstreaming capacity with partners. Pilot projects were conducted in Nigeria, Indonesia, Kyrgyzstan, and Bolivia on gender mainstreaming in hazardous chemicals and waste reduction sectors. The CBD plan requests the parties to produce a collection of best practices and case studies that highlight gender mainstreaming activities in Indigenous and local communities. Some of these case studies focus on girls and women and their participation and influence on biodiversity conservation. The Minamata plan contains a section on the production of gender case studies that will help locate contextualized challenges in gender mainstreaming implementation in the Minamata convention and in the other chemicals and waste MEAs.

Within data collection, the reference to **gender or sex-disaggregated data** is mentioned only in the CBD and UNFCCC action plans. In the CBD plan, the COP encourages parties and other relevant organizations to collect and use gender-disaggregated data in order to mainstream gender in the Aichi Biodiversity Target indicators. Parties are encouraged to include gender-disaggregated data when adhering to the national biodiversity targets as well as examining which sectors are already using this type of data. In UNFCCC Table 1 Priority Area A states that parties and relevant organizations should "enhance capacity-building for governments and other relevant stakeholders to collect, analyse and apply sex-disaggregated data and gender analysis in the context of climate change, where applicable".

Gender parity regarding actions outside the secretariat was brought up in each of the four action plans. In the 2017 COP to the BRS conventions, the parties noted that more work is needed to ensure that "women and men from all Parties are equally involved in the implementation of the three conventions, are represented in their bodies and processes and this inform and participate in decision making on gender-responsive hazardous chemicals and wastes policies". Similarly, the UNFCCC plan states that there is urgent action needed to improve the gender parity and representation of women in party delegations. In the CBD plan, an action parties are encouraged to take is to ensure that women play a part in all stakeholder group consultations during the national reporting implementation process and "consider providing dedicated capacity-building for women's groups". The Minamata plan is unique in that it lists the current makeup of Implementation and Compliance Committee members where they state that seven are male and eight are female.

All four gender action plans emphasize **baseline and reporting** activities. Some activities referred to secretariat baselining or reporting; however, many related to the parties and their actions. BRS sets the objective that partners should develop a baseline of gender-related areas in the programs and projects. Similarly in the CBD plan, it requests that partners identify a set of indicators for biodiversity and gender. The CBD plan requests parties to provide a report on actions undertaken in the plan as well as "monitor and report on the participation of men and women in implementation processes". Another possible action for parties is to track and document a list of gender-related commitments at the country as well as international level. The UNFCCC plan requests that all constituted bodies include their gender mainstreaming progress in their regularly submitted reports and invites parties to include their gender-related work in their national reporting process.

There are also references to **funding and resources** from the party view in the gender action plans. The CBD plan mentions that donor involvement is crucial in gender mainstreaming activities on the international, regional, national, and local levels. The Global Environment Facility (GEF) has specifically mandated Policy on Gender Mainstreaming and other safeguards of subsequent GEF agencies. The plan also explicitly calls out the need to ensure that activities relating to gender mainstreaming receive adequate funding. The BRS plan outlines funding requirements that each activity will need. Often, funding is characterized as "cost-neutral (staff costs only)"; however, additional outside funding sources for consultants were indicated.

Communication and awareness aspects relevant to convention parties are detailed in the CBD and Minamata plan and briefly mentioned in the UNFCCC and BRS plans. In the CBD plan, parties are encouraged to compile and share case studies around gender mainstreaming and biodiversity with a specific focus on those that promote the "unique knowledge of biodiversity held by women". The CBD plan also suggests that parties consider providing informational material on the convention and its plan of action in accessible formats to both women and men. In the Minamata plan, awareness and communication efforts are mainly centered around gender trainings to parties. These training activities include regional workshops and communication around tools to increase gender mainstreaming.

In relation to party or stakeholder activities, **capacity building & decision-making** aspects are mentioned in all of the action plans except in BRS. The CBD plan specifically states that "building women's capacity, and ensuring the equitable involvement of women, particularly Indigenous women, at all levels of decision-making" will benefit convention processes. In order to do this, there must be a needs assessment completed to optimize the involvement of these groups. Training for women, particularly Indigenous women leaders, should be conducted before the COP meetings to the convention. A pool of experts and facilitators on gender issues and biodiversity should be supported as well. The UNFCCC is unique in the way that it points to specific capacity-building facilitation for national climate change and gender focal points. The Minamata plan has a specific capacity-building and technical assistance program where special attention is given to the "differential needs of men, women and vulnerable populations", as well as training workshops for parties.

Linkages to social and environmental issues within an intersectionality lens are touched upon in each of the action plans. This code references any connection of the primary environmental issues which the convention regulates to another environmental or social issue. For example, the vision section of the BRS plan advocates for the plan to lead to greater recognition of the linkages between poverty, gender, and hazardous chemicals. The CBD plan links to the SDGs as well as reviews policies in other areas such as "tenure and use rights, literacy, employment, education, health, local governance and decision-making and access to financial resources" when identifying potential gender mainstreaming policy obstacles. The

Minamata plan highlights that human rights issues should be integrated within the program life cycle. It also makes connections to the SDGs specifically Goal 5 on gender equality. Lastly, UNFCCC brings forth an intersectionality perspective stating that parties are "recognizing with concern that climate change impacts on women and men can often differ owing to historical and current gender inequalities and multidimensional factors and can be more pronounced in developing countries and for local communities and Indigenous Peoples".

4.3 Secretariat Interview Results

This section presents the major findings stemming from MEA secretariat interviews. Interviews were conducted with one representative from BRS, CBD, SAICM, and Ozone treaties, and two representatives from the Minamata Convention. Interview questions are found in Appendix B. The qualitative content analysis process with NVivo used the same codes as the gender action plans. As a result, three additional themes took shape during the interviews, which were not found in the corresponding action plans.

4.3.1 Major Interview Findings and Analysis

Major activities and themes that materialized the MEA secretariat interviews were (1) funding and resources, (2) implementation, (3) stakeholder collaboration, (4) party perspectives, (5) linkages to social and environmental issues, and (6) gender equality perspectives. Themes arising from the interviews, but not mentioned in the gender action plan analysis, were gender diversity, party perspectives (actions, influence, dissent, etc.), and COVID-19 impacts. Figure 4-4 below summarizes the total references coded in the interview analysis.

Interview Findings

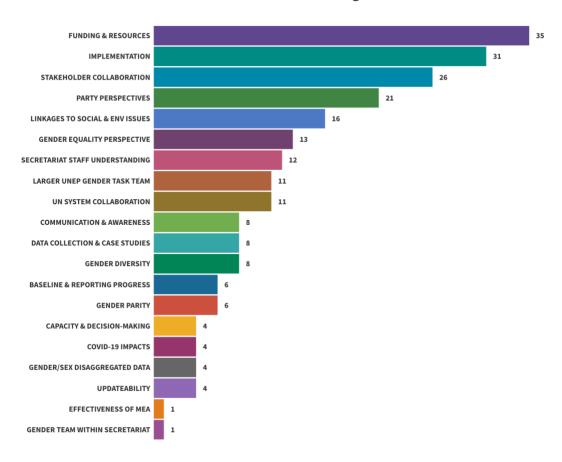


Figure 4-4. Bar Graph Analysis of MEA Secretariat Interview Findings Source: Author's own creation

Funding and resources were the most referenced theme that surfaced during the MEA secretariat interviews. From the BRS perspective, much of the early gender work by the secretariat, including the gender action plan, was done on a voluntary basis with funding coming from primarily government donors. SAICM and Minamata secretariats disclose that the Global Environment Fund (GEF) is a major funding body for the agreement actions. A key takeaway from the BRS interviewee was that GEF funding has focal areas of different environmental issues, but they also look at cross-cutting issues and include a gender perspective within their projects. The CBD interviewee also mentioned the GEF and described how the Small Grants Program has funded many grassroots organizations including women's organizations working on gender-related issues. The resources and time capacity of the CBD secretariat has been quite limited at times, but they do have one dedicated person working on gender issues as well as working with consultants from time to time. The Minamata secretariat does not have a dedicated position working on gender at this time as their convention is very young (about three years old). The Multilateral Fund is a major funding body for the Ozone treaties program implementations. This fund requires all projects to take a gender lens and a gender mainstreaming perspective.

Another key theme from the interviews was challenges and opportunities around implementation. According to the Ozone treaty interviewee, implementing a gender mainstreaming focus is a relatively recent development. Previous work includes a gender background report published in 2019. In 2021 one area of focus will be the development of a gender action plan. In addition, the Minamata gender roadmap is currently under development. The secretariat stated they are thinking about specific priority action areas that need to be taken by the secretariat in order to incorporate a gender mainstreaming approach. In development of the roadmap, the interviewee stated that the secretariat has conducted a literature review exploring the linkages between mercury pollution and gender issues, and also collected information from parties and stakeholders to identify what actions are currently being implemented.

Two of the existing gender action plans are in the process of being updated – the BRS and CBD plans. The CBD secretariat is developing a new gender plan of action for the post-2020 period. The interviewee stated that they want to focus on party actions with measurable outcomes. The CBD interviewee highlighted that in the current gender plan of action, reporting on gender mainstreaming activities from parties was not a requirement; however, in the most recent national reporting, there was an increased amount seen from parties. A highlight that the BRS interviewee noted is that the gender action plan is currently being updated with additional implementation provisions, and another area under development is the technical guidelines which detail how parties must implement the conventions (which are soft law mechanisms). The interviewee summarized: "Gender is being discussed as something that needs to be included in these important technical documents. That's not been done in the past, and that's really quite a critical discussion that's going on at the moment" (BRS Interviewee, 2021). One common theme that each of the interviewees touched upon is the fact that the secretariats are there to assist and serve the parties – they cannot tell parties how they should incorporate a gender lens into their implementation.

Stakeholder collaboration was a key activity mentioned by each of the secretariats. The CBD interviewee shared that a major lesson learned was to engage with partners as much as possible including NGOs, bodies in the UN system, grassroots organizations, etc. Additionally, collaborating with UN Women was highlighted as an important activity within the secretariats. One of the Minamata interviewees described the importance of strong partnerships with other groups in that they can help with gathering data, for example around awareness-raising strategies and promoting gender issues from a national angle. The Minamata secretariat stated that they

are currently discussing how to grow the engagement with civil society partners and including NGOs to participate in the COP meetings as observers. One of the challenges mentioned by the CBD secretariat around gender and COP meetings related to stakeholders' involvement in many topics around biodiversity issues. They had planned on a women's caucus meeting during COP 13 in Cancun. However, it was pushed to the wayside as many other network bodies were convening at the same time making it difficult to organize a separate meeting. The SAICM secretariat highlighted that the new SAICM Beyond 2020 framework envisioned an organized virtual working group where NGOs and other bodies such as academia come together to discuss their input for the new framework. The targets and indicators working groups included discussion around gender elements, with the NGO community voicing their enthusiasm to have gender indicators included in the framework. One area where the SAICM interviewee stated as a possible opportunity is engaging the medical community and interlinking the human health angle to the environmental and toxic chemicals angle. They stated that the medical community has great power if engaged strategically. The more communities are aware of potential daily exposures to chemicals, the more risk could be avoided.

Each of the secretariat interviewees was questioned about party perspectives: "Were there any parties which stood out as being in support of a gender lens or any areas of push back?" The CBD secretariat responded that gender can sometimes be a more difficult topic to work on because generally, parties working on biodiversity conservation are coming from a more natural science background. Some examples of supporters taking a gender perspective in the CBD include Sweden, Finland, Costa Rica, Canada, Malawi, South Africa, and Mexico. As far as pushback on the gender issue, the interviewee expressed that no major countries came to mind, but some individuals have expressed pushback at times. Similarly, in the Minamata secretariat experience, there was not any major pushback or controversy around including gender aspects, as there is such a clear link between mercury exposure and women and children. However, in the development of the convention, there was strong stakeholder engagement from some opposing groups. Some expressed concerns about mercury-containing vaccines and autism, while others voiced concern about mercury in dental amalgam. Another dynamic regarding party perspectives showed that the SAICM framework differs from other MEAs in that everyone has an equal voice in negotiations and meetings. The interviewee stated that in traditional COPs, the parties have the most significant voice, then government representatives of non-parties, then other stakeholders such as NGOs. This poses a challenge, due to the number of stakeholders requesting different items. Incorporating multiple requests can prove to be difficult and result in conflicting priorities.

Each of the interviewees identified linkages to social and environmental issues. The UN SDGs were mentioned by BRS as a significant driver for organizations and governments working in the sustainable development arena to include a gender equality lens. The Ozone secretariat interviewee identified the many interconnections between ozone depletion and other health and environmental issues. For example, ozone depletion leads to an increase in UV radiation, which has an impact on human health in regard to levels of skin cancer and other medical issues. Ozone connection to plant, animal, and ecosystem welfare is also documented in many studies, as well as having an impact on climate change. The interviewee described that some of the ozone-depleting substances which were phased out have high global warming potential. This has resulted in a direct impact on climate change and global temperatures. A gender lens can be applied when addressing each of these environmental challenges. One unique aspect that the Minamata secretariat brought up is that the convention works to increase protections for workers in the informal labor sector whereas other MEAs do not explicitly address this issue. The example described was in the artisanal gold mining sector where health risks are increased from inhalation of mercury vapor as a result of the amalgamation process.

More so, much of the amalgam burning is conducted in or near residential areas, sometimes even inside homes, so women and families are exposed to harmful chemical methylmercury.

A gender equality perspective came through in each of the secretariat discussions. However, even within the secretariats, there appeared to be differences in understanding of gender as a concept. The BRS interviewee discussed the differing opinions around a publication about plastic waste that contained a chapter dedicated to gender issues. Some expressed that they felt men were being excluded from the discussion and there was a sole focus on women. Others felt that there should be a focus on women and women's empowerment because for centuries they haven't had a place at the table in these discussions. The SAICM interviewee brought up the struggle which emanates from the evolution of how gender is talked about and how it can become ambiguous at times. In the SAICM framework development in 2006, the language around gender referred to women and vulnerable populations. The discourse has since moved towards a focus on women and chemicals which the interviewee also finds somewhat confusing. A major takeaway was that the discussions around gender are mainly focusing on women; however, it may be beneficial to broaden this scope by focusing on chemical impacts on all different genders. This could be a way to connect with additional stakeholders around this topic, such as the public health community.

The area of data collection and case studies came up at least once during each of the interviews. The BRS gender-focused case study projects that took place in four different countries was completed in 2017 as part of the gender action plan. When asked about future plans, the BRS interviewee specified that there currently are not any in the works because of a lack of funding. However, if a donor came in the future requesting projects around gender, they would definitely accommodate that. The Minamata secretariat hired a consultant to conduct an extensive review collecting data regarding the linkages between mercury pollution and gender, and how this pollution impacts women and children disproportionately as part of the work around gender mainstreaming in the convention. This review confirmed the strong links between mercury pollution and certain diseases, especially amongst pregnant women. The secretariat is currently drafting a synthesis report of this literature review, which it plans to make public in 2021. The interviewee specified that data for the Minamata convention was easier to find because they are focusing on only one kind of pollutant. Other conventions such as the BRS conventions deal with a much larger variety of different pollutants, which can make reviewing existing data more complicated.

The gender equality perspective impacts the **gender diversity** discourse. One question brought to the secretariats was: "How are gender-diverse people being included in this discussion, if at all?" The BRS interviewee explained that at this time the work is focused more on the binary framework. In the future, they predict that gender diversity discussions will come up more often. The CBD secretariat said that gender diversity is something that is being considered more frequently, but there is still much work to be done to include women at the table. The secretariat asserted that we still lack sex-disaggregated data, especially for transgender and LGBTQ people. They concluded with; "I position this work on gender and the focus on women as a starting point, as a way of kind of opening up the conversation as in terms of looking at who is being affected, who needs to benefit. So, in asking those questions, ideally and hopefully inevitably, it will include a broader spectrum of people, but the positioning of language we are not there at this point in time" (CBD Interview, 2021). Similarly, the Minamata interviewee declared that they haven't seen gender-disaggregated data that goes beyond male and female. They recognize the need to look beyond impacts on women to impacts across genders.

Regarding **gender- and sex-disaggregated data**, the Ozone secretariat stated that there is very little or no data that is disaggregated on the gender level around ozone depletion. This makes it

difficult to implement the gender lens when the data is not there. However, she mentioned that links between women's disproportionate impacts and ozone depletion are there. The interviewee gave the example of ozone depletion leading to higher UV radiation. In some countries, women are primarily working outside in the fields, or outside collecting water and firewood and therefore could be more exposed to an increase in radiation. Conversely, to the Ozone experience around sex- and gender-disaggregated data, the SAICM secretariat expressed that with the chemicals community, there is a benefit in that linkages between chemicals and differing exposures to women and men is clearer. From a biological perspective, the links are easier to connect. Additionally, in the Minamata convention, the interviewee stated that everyone going into the negotiations of the convention had a gender perspective in mind because of the clear links of mercury pollution to women, pregnant women, fetuses, and babies.

Looking within the secretariat's organizational activities, one of the difficulties noted was that collaboration within the UN system can be challenging at times. The CBD secretariat believed that there are opportunities for engagement and collaboration with other bodies in the UN system, however, these efforts are "not as fully formed in a lot of cases in part because people have quite big workloads and it's not always easy to find ways to collaborate on things" (CBD Interview, 2021). Relating to a dedicated gender team within the secretariat, the CBD interviewee mentioned the significance of having a full-time gender program officer position. The BRS secretariat stated that in their work they only have about five percent of their time dedicated to working on gender issues. They do have a gender task team of ten people within the secretariat who are working on various gender mainstreaming initiatives.

An area of opportunity emphasized by many of the interviewees involved the larger UNEP Gender Task Team. The Ozone secretariat voiced that this task team will begin convening in 2021 and plan to discuss synergies and areas of potential collaboration between the different MEA secretariats. The Minamata secretariat plans to share the draft gender road map with the Gender Task Team to get their input and learn from experiences from other integrated gender action plans. Nonetheless, one challenge point within the Gender Task Team that the Ozone secretariat mentioned which was also discussed by the Minamata interviewee relates to secretariat staff understanding that many of the gender focal points do not have a background in gender and tend to 'wear many hats' in their role at the secretariat. However, the interviewee expressed that "we are now working towards increasing the capacity of these gender focal points through our regular network meetings and we hope to bring in expertise from UNEP and UN Women as well to help us in actively having more of a concerted gender mainstreaming focus" (Ozone Interview, 2021). The BRS secretariat mentioned that capacity and decision-making activities were mainly focused on assisting parties. Currently, a secondgeneration online training around gender mainstreaming is being developed in order to increase the depth of parties understanding around implementing a gender lens in their compliance with the conventions.

Gender parity was another issue highlighted especially by the Ozone secretariat. The secretariat has played an active role in promoting female delegates to attend meetings such as the COPs and participating in assessment panels. They have worked to have a high female staff proportion within the secretariat. Additionally, the Ozone secretariat is brainstorming ways to increase gender parity in the party activities section of the gender action plan currently under development. They may introduce a quota requirement of a certain number of female delegates from parties to participate, instead of just recommending and suggesting this action.

As far as continuous work and **updatability** of gender action plans, the BRS secretariat stated that the plan is in the process of being updated and was supposed to be presented at the 2021 COP. This meeting was postponed due to the **COVID-19 pandemic** and a virtual session will

take place instead. Minamata and SAICM secretariats also revealed that the global pandemic has had an impact on activities including gender. In Minamata's case, they are discussing whether to have a slimmed-down COP meeting in 2021 or to postpone until 2022. They are still trying to determine where gender issues will fit within the agenda for the 2021 meeting. The SAICM interviewee expressed that the conference that was supposed to take place in July 2021 has been delayed indefinitely and will possibly be moved to 2022 or 2023. This can be viewed as a challenge, but from the SAICM perspective, this is an opportunity to devote more time for reflecting on gender mainstreaming issues within the framework.

Baseline and reporting came up a few times during the interviews, primarily in relation to parties' reporting on their national action plans. For example, the CBD secretariat mentioned that reporting on parties' actions around gender was suggested, but not required. They were pleased to find that in the latest round of reporting, the sixth national reports received, that there was an increase in reporting around party actions and activities in relation to the gender plan of action. The interviewee specified that this was partly because GEF funding played a part in the sixth national reports – "they [the GEF] took it upon themselves to ensure that those reports that they were supporting would be gender responsive, so they put a lot of effort into supporting countries to incorporate reporting in terms of examples, informational policies, and a range of things in the actual sixth national reports" (CBD Secretariat Interview, 2021). This baseline of information assisted the secretariat in drafting the updated gender plan of action. The Minamata secretariat brought up that they are using the UN-SWAP strategy (implemented by UN Women which ensures that SDG 5 is achieved) as a way to measure progress on gender objectives and indicators around the convention.

Communication and awareness were discussed in the CBD interview primarily as increasing messaging to parties of the interlinkages between gender and biodiversity. Many of the UNFCCC parties are also parties in the CBD. The interviewee stated that since parties are already putting a gender lens into their climate change work, they should make sure to include biodiversity as well. They went on to state that "gender and environmental issues, in general, has not been a well-explored topic, especially compared to other more obvious issues like education and health" (CBD Interview, 2021). This seems to be shifting somewhat, but it is still slow-moving, partially because there is not a lot of data and information to draw upon and the connections are not as obvious to most people. Communication and awareness to the general public were brought up by the Minamata secretariat where they stated that chemicals and their exposure risks are not as commonly known and understood. In other words, many people do not know the risks they are facing from everyday products containing chemicals. Awareness is increasing, but gender impacts specifically are moving at a slower rate.

4.3.2 Unique Findings & Conclusions of Secretariat Interviews

One unique finding separate from the coding journal themes that came up in the BRS interview was that "global environmental law is quite fragmented" (BRS Interview, 2021) and we do not currently have a **global environmental compact** in place which details overarching principles of environmental law. According to the interviewee, this was something that was discussed amongst UNEP and member states of the UN Environment Assembly in the last few years. They added that there has been some support for a global compact, however, there has been opposing views who think that "we've got these MEAs and should be developing areas to target specific environmental issues rather than looking at one environmental treaty to try and fit every issue" (BRS Interview, 2021).

Another aspect specified was the **time frame** in which gender issues were brought up within the conventions. The Ozone secretariat said that the gender lens has come into the Ozone conventions relatively late, and work has been ramping up only recently. Similarly, in the BRS

treaties, the interviewee expressed that it would have been great to have gender mentioned in the treaty text from the beginning; however, gender issues came up first by the executive secretary then mandated by the parties in 2017 and took off. Creating a line of communication around a gender perspective from the beginning would have been helpful in resource allocation. It is not too late to bring in these issues retroactively, however, it is much more difficult. They reiterated that it is exceptionally important to have a mandate from the parties in order to focus efforts on working with gender mainstreaming and larger communication within the MEA community.

Personal motivations came up only in the SAICM interview. The interviewee mentioned that in some cases, personal motivations help bring an extra gender mainstreaming perspective in the process. They gave an anecdote where the secretariat was working on a GEF-funded project and one colleague made clear that they wanted to strive for a good score on gender – this was a goal they have wanted to accomplish in their work. This motivation influenced the rest of the secretariat, and they came together to place a special emphasis on gender issues within this project. The interviewee stated that "I think we really gave it that extra mile that I think also the project results start to demonstrate that" (SAICM Interview, 2021).

The next chapter will discuss these findings and their significance, as well as limitations, and examining the methodological choices of this project.

5 Discussion and Analysis

This chapter critically examines the results of the research project and highlights the most significant findings. The aim of this research project was to examine the characteristics and concrete processes of selected international environmental agreements which incorporate a gender equality aspect as well as identify major challenges and areas of opportunity for Multilateral Environmental Agreement (MEA) secretariats going forward. First, a review of the terminology used in the convention texts was completed through a gender screening template. Second, was an in-depth examination the MEA gender action plans. Finally, gaining an account of the experience and knowledge of secretariats who have worked with gender equality and the conventions. The literature review helped to identify the gender screening template as well as a framework in which to examine the gender action plans and secretariat interviews. The following three primary research questions were examined in this project:

RQ1: What type of language is used in the texts of selected MEAs in relation to gender mainstreaming?

RQ2: What are the major activities and themes of the MEA gender action plans?

RQ3: What challenges and barriers have MEA Secretariats faced when including gender mainstreaming in the MEA planning and implementation process?

5.1 Significant Findings

5.1.1 MEA Gender Screening Template Analysis

In order to address RQ1, a set of agreements needed to be decided upon. A search of the UN InforMEA database which contains information on UN environmental treaties, identified a large number of results when searching 'gender' in all categories (including communications, publications, proceedings, etc.). Results can be found in Appendix C. A search for 'gender' in the Basel Convention resulted in 350 hits, while the actual text contained zero references to women or gender. Another interesting finding became evident during the four-month time period of this thesis. The number of search results for 'gender' increased substantially. From 274 results in the beginning of the thesis period, to 491 results at the end of the fourth-month time span. With an increase of over 200 documents added to the database in just a short amount of time, this demonstrates that the gender topic within the MEAs is trending dramatically higher.

Addressing RQ1 initially involved a search for gender terms such as 'men', 'women', 'gender', etc. (Table 4-1). Gender references comprised fairly low number of mentions within the agreements. Most agreements had no references at all, while some had two to three. The only text containing more than three references was the SAICM text. However, this is a global framework, and it differs from the other convention texts. It contained subsequent texts and resolutions of the International Conference on Chemicals Management and is a non-binding global framework, which has different characteristics than the other MEAs. The low amount of gender references in the texts themselves compared to the high number of hits from the InforMEA search – leads to one possible explanation, i.e., a gender equality perspective was not as common when the treaties were initially negotiated and drafted, but now appears to demonstrate increasing interest and focus. The Ozone secretariat interview confirmed that when the Montreal Protocol was drafted in the 1980s – no specific gender lens was applied.

From the gender template screening assessment, **add-on language** was the most coded reference. Add-on language, or including women as part of a list, was most commonly referred to when describing the health status of vulnerable populations, such as children, the elderly, the

poor, and workers. One perspective that includes women as part of vulnerable communities recognizes that women are disproportionately affected, especially in regard to chemical exposure. On the other hand, this may disregard women as empowered change-agents who do not need to be protected. Rather they should be listened to and regarded as respected voices in the community. Interestingly, the mention of women as part of a vulnerable group was highlighted in two of the chemicals and waste related MEAs. This could perhaps reflect how the scientific community discusses chemical hazards to women, especially pregnant women or women planning to become pregnant. The Stockholm Convention specifically calls out the potential hazardous impacts of persistent organic pollutants on women and future generations.

This discussion also arose during the literature review, specifically when examining different theories and academic perspectives to study the gender-environmental nexus. In the Castaneda et al. (2013) paper, they discuss the different relational models used in history where one model highlighted is the Women in Development (WID) approach. They state that this approach is often utilized by policymakers. Although the approach includes women in sustainable development policies, they argue that women are still treated as a separate vulnerable group, specifically pointing out rural women. The WID approach has been critiqued by Castaneda et al. (2013) and others for disregarding the notion that women, especially rural women, can be powerful agents of change who have generations of experience managing environmental resources in a sustainable way (Castaneda et al., 2013). Women as part of a vulnerable community was also examined by the Environment and Gender Information (EGI) reports. The 2017 BRS analysis of party national implementation plans found that over a period of eleven years, women were categorized as vulnerable 41% of times and as agents of change only 2% of the time (Gilligan & Sabater, 2017). Further examination of other EGI reports is needed in order to support a generalization that women are primarily referred to as part of vulnerable groups.

This thesis took a Gender and Development (GAD) and intersectional point of view where environmental and social impacts are taken into account when looking at gender equality issues. The literature review identified that "an important contribution of this approach with regard to policymaking is the use of the term "gender" as opposed to "women," as it also accounts for men's participation in the development process" (Castaneda et al., 2013, p.671). In the MEA term search, this resulted in 'women' being mentioned 25 times (17 were in the SAICM texts) and 'gender' not found at all in the text, only in the sidebar notes when categorizing statements in the treaties. There was no mention of 'men' found in the treaty texts as well as no considerations about male participation in regard to gender equality issues. It is interesting to note the choice of terms, especially that the four treaty texts including gender terms were published in 1993 (CBD), 2004 (Stockholm Convention), 2006 (SAICM), and 2017 (Minamata Convention).

Action-oriented language around women's participation was referenced a total of eight times albeit only in the SAICM text. Many of these references called for meaningful participation of stakeholders (including women) as part of decision-making, policymaking, and convention implementation. This came up in the literature review when examining the different dimensions of gender equality. The political dimension (see Table 2-1) referred to male-dominated political spheres having a significant influence on environmental decision-making. Women might possess differing perceptions and attitudes towards environmental solutions. It is significant that only the SAICM framework denoted the importance of women's active participation in decision-making around these environmental challenges. Other MEA texts lacked this action-oriented terminology.

Overall, there were only three examples of **hortatory** language found in the MEA texts, and each were in the preamble section. The United Nations Environment Programme (UNEP) MEA Negotiator's Handbook stated that the preamble is not a legally binding section of the treaty, but can be a way to present differing views of parties or areas that are still unresolved (UNEP et al., 2007). Additionally, the Handbook states that "when the text leaves ambiguity about rights and obligations of the Parties, the preamble serves as part of the interpretive context by helping to indicate the object and purpose of the treaty, and may thereby assist in resolving such ambiguity" (UNEP et al., 2007, p.18). Moreover, Broeckhoven's 2017 legal analysis on gender and the Rio Conventions, (in reference to the UNFCCC specifically) noted that the initial mentions of women and gender were primarily hortatory. However, they have evolved to become more action-oriented over time (Broeckhoven, 2017). Finally, there were no significant outcomes of the **linkages to implementation – clear or vague** as they had a similar number of occurrences in the MEA texts.

5.1.2 Gender Action Plan Analysis

In addressing RQ2, significant findings related to activities within the secretariat, as well as outside the secretariat (parties, stakeholders, etc.) are examined. The following section discusses key takeaways from the four gender action plans reviewed. The CBD had by far the greatest number of references while the BRS plan had the least. The top five most referenced activities (in both within the secretariat and outside the secretariat) were (1) communication and awareness, (2) stakeholder collaboration, (3) baseline and reporting progress, (4) implementation, and (5) linkages to social and environmental issues. Whereas, the least referenced activities were funding and resources, UN system collaboration, gender team within the secretariat, and the updateability of the plan.

5.1.2.1 Significant Findings from within the Secretariat

Clearly, the MEAs not only the four with gender action plans, but many examined in this research, contain a high level of **communication** developed for the public, parties, and stakeholders around gender. The gender term search conducted in the UNEP InforMEA webpage which included information on environmental treaties, (Appendix C) showed that there is a high number of results relating to gender searches. The Basel Convention, UNFCCC, Stockholm Convention, and the Rotterdam Conventions support this finding.

Additionally, some of the conventions in this study published documents on gender impacts and the specific environmental issue which the convention regulates. Even if there was not a specific gender action plan released, each convention contained informational documents on gender. Notably, three out of the four plans had some reference around action plan accountability. Plans that included short-, medium-, and long-term goals demonstrated the most detailed activities. Specific details as the intervention logic of each planned activity, indicators and means of verification, who in the secretariat was responsible for implementation, and the funding source needed to complete the activity were delineated in order to create a detailed picture of secretariat activities.

Each of the MEA gender action plans highlighted **secretariat staff understanding**. Since the secretariats are the governing bodies of the MEAs, it is logical that the secretariat needs an enhanced understanding of gender equality issues in order to help parties implement them. One unique aspect mentioned in the BRS plan not brought up in other plans included an objective that supports staff in striving to attain a sustainable work-life balance. This relates to the socioeconomic gender dimension brought up in the literature review in Table 2-1. The gendered division of labor can often lead to women working their regular full-time job as well as taking care of housework, family duties, and other household activities (WECF & UNEP, 2016). The

BRS gender action plan aims to define a gender-transformative policy that seeks to address the root causes of gender inequalities, even within the secretariat body itself.

Efforts to **collaborate with other bodies in the UN system** and following the lead of other MEAs which have included gender mainstreaming activities comprised an important element in the gender action plans. Taking lessons learned from other MEAs gender mainstreaming work can help in avoiding duplication of efforts or starting from scratch with future gender action plans. Fundamentally, **collaboration with stakeholders**, including NGOs, private sector organizations, and other partners was cited as a valuable dynamic in each of the gender action plans. As discussed in the literature review, stakeholders, especially the NGO community, have a strong voice advocating for inclusion of a gender lens within the UN system.

5.1.2.2 Significant Findings Outside the Secretariat

Many activities within the gender action plans were directed towards parties and other bodies outside the secretariat. This was especially the case when describing the **linkages to social and environmental issues**. It is important to note the significance of the plans that do not address the environmental issue regulated by the MEA as its own separate issue. Rather, they describe how environmental issues are interconnected with other social issues. Connecting the MEA environmental issue of focus with the Sustainable Development Goals (SDGs) was discussed within the plans. Another aspect mentioned in one of the UN publications was not only obtaining **sex-disaggregated data** which makes explicit the differences between men and women, but also data on "age, disability, ethnic group, socio-economic status, and other relevant diversities" (United Nations Development Group, 2017, p.19). More so, data availability can present a challenge faced by countries. This can impact the **baseline and reporting** of gender mainstreaming efforts (United Nations Development Group, 2017).

Viewing gender equality as a human rights issue was brought up in one of the plans. This echoes many of the civil society publications reviewed in the literature analysis whereas gender equality issues are directly linked to human rights issues (see Corral, 2002; Friends of the Earth International, 2020; MSP Institute, 2019). A few of the plans mentioned intersections between climate change, hazardous chemicals, poverty, education, financial resource access, and public health as well. In contrast, another perspective brought up in the literature review was that gender mainstreaming and intersectionality can sometimes be viewed as contradictory and an add-on by organizations or governments (Hunting & Hankivsky, 2020). As long as action-oriented language is used when referencing intersectional aspects in the gender action plans, this could lead to a positive outcome. If hortatory phrases like 'recognizes' or 'aware of' are not combined with action items, this may be viewed as a problematic intersectionality add-on in the gender action plans.

Engagement of women's groups and stakeholder collaboration was a key activity in the gender action plans. The CBD plan was unique in describing how collaboration with Indigenous leaders and community members was crucial for achieving the biodiversity conservation targets. This aspect was highlighted in the UN free open online course on Gender and Environment where it noted that Indigenous Peoples often pass biodiversity and ecosystem knowledge down through generations (UN CC:e-Learn, n.d.). In addition to collaboration with Indigenous Peoples, engaging women's groups working in the areas of agriculture, forestry, and fisheries is mentioned in the CBD gender action plan. The UN Gender and Environment course highlighted that women represent 43% of the global agricultural labor force, 73% in the Congo, and even up to 95% in rural areas (UN CC:e-Learn, n.d.). Women have active roles in the agricultural sector such as seed saving, cultivating and maintaining local crop varieties which has a positive impact on biodiversity (UN CC:e-Learn, n.d.). In the fisheries and marine sector, women face persistent inequalities in limited decision-making power where they are often

designated jobs doing prep work and cleaning instead of managerial work (UN CC:e-Learn, n.d.).

5.1.3 Significant Findings from Secretariat Interviews

To address RQ3, identifying major challenges and barriers to including gender mainstreaming activities in the MEA secretariats' work, semi-structured interviews were conducted. Overall, the interviews supplemented the online literature review in adding personal experience and indepth examples of challenges faced by the secretariats in the gender mainstreaming process. There were aspects highlighted in the interviews which were confirmed by the literature review. Interestingly, some new themes came up as well. Major takeaways were that the work to include a gender perspective in the conventions and to parties is occurring, but the lack of funding and resources is a persistent challenge. Despite this, gender action plans and action plan updates are still progressing, and data collection continues. One aspect that stood out from each interview was the neutrality of the secretariats in being careful to not push requirements on parties around gender. Often times, gender reporting was suggested, but not required as this would be too difficult to impose as parties negotiate the mandates and requirements of the conventions. Given these challenges, secretariats brought up multiple angles for opportunity including stakeholder collaboration and bringing an intersectionality lens into the convention work.

Funding and resource availability was a key challenge highlighted in the secretariat interviews. Additionally, funding was one of the least coded references in the gender action plan assessment. Most often, there was only one person working on gender in the MEA secretariat and even so, gender issues may only be a small portion of their work. Some MEAs have an official dedicated gender focal point; however, the Minamata secretariat brought up that they do not have a focal point yet because of funding and that the convention is quite new. Because resources are limited, the CBD secretariat mentioned that engaging with the UN system and UN Women is crucial in increasing gender mainstreaming work. A few of the secretariats mentioned engagement with the UN System-wide Action Plan (UN-SWAP) that is a framework to assess how SDG 5 on gender equality is being met. However, the UN-SWAP was not referred to in any of the four gender action plans. Including gender as part of the funding for the parties in MEA implementation was a significant point discussed by the secretariats. The Global Environment Facility (GEF) and inclusion of gender mainstreaming in the policy guidelines was highlighted. The GEF 2017 policy on gender has protocols to assess gender in project identification as well as project development of all GEF-financed activities, including sexdisaggregated data monitoring and reporting (Global Environment Facility, n.d.)

Collaboration with stakeholders was an important factor in the secretariat's planning and implementation; however, was found to at times be diluted with the many asks of stakeholders. One aspect related to communication that was brought up by the CBD secretariat was in regard to how nations are often parties in multiple conventions. Ideally, parties should make clear links between the gender equality aspects relating to each environmental issue; however, often times national governments are siloed in their separate departments. For example, a department working on climate change issues might be separate from the department which oversees chemicals and human health, so there might be barriers to internal communication around gender.

COVID-19 impacts were described by the secretariats as a challenge which resulted in the postponement of meetings and action items. The International Institute for Sustainable Development's (IISD) "State of Global Environmental Governance 2020" report discussed this in detail. They stated that 2020 was gearing up to be a highly productive year for global environmental governance; however, the global lockdown impeded the progress of multilateralism (Allan et al., 2021). The IISD report brings up that international negotiations are

dependent on face-to-face negotiations: "The COVID-19 pandemic disrupted the practices and procedures meant to ensure effective, equitable, and transparent negotiations" (Jen Allan et al., 2021, p.1). They specifically mention how the UNFCCC and CBD subsidiary bodies are waiting until in person meetings can be resumed to continue as well as that many negotiation issues are being pushed in the future or even indefinitely (such as in the SAICM case) until it is safe to meet in person again (Allan et al., 2021). It was argued that even though many activities have moved to an online forum, we should question the equitability as not all countries have consistently reliable internet connections. In addition, the IISD highlights how scientific advice is crucial to MEA development. It is stated that "the pandemic poses a significant threat to how quickly scientists gather, draft, agree, and communicate their advice. Scientific bodies face additional challenges working in a virtual environment that can amplify serious structural inequalities across gender and development lines." (Jen Allan et al., 2021, p.5). One additional challenge mentioned is that many people are working from home and this poses a specific difficulty to women who are often in charge of household and caretaking responsibilities have less time to work (Allan et al., 2021). This relates to the socio-economic gender dimension where women are more likely to be responsible for household and caretaking duties (WECF & UNEP, 2016).

Gender diversity was an interesting area of discussion within the MEA interviews. The overall takeaway was that this is not an area being discussed at the moment but could be something which could gain more attention in the future. One point made was that women are just getting their seat at the table and there is still so much more work and data needed on how environmental issues impact women differently – that we should continue this conversation. The literature review suggests that UN publications are not publishing about gender diversity. However, in non-governmental organizations and academia – especially gender studies departments in universities – gender diversity is a topic which is being discussed more.

Gender parity was something that the secretariats have made progress on, especially the Ozone secretariat. However, there is still much progress needed to increase gender parity in delegations and scientific bodies. Referring back to the Ong, et al. (2018) article on women of color in STEM higher education, they mention that women, racially or ethnically underrepresented students, as well as women of color have often been left out of traditional STEM education or career opportunities. This could potentially be related to the number of women working in natural science and conservation fields. As the CBD secretariat mentioned, generally parties working on biodiversity conservation are coming from a more natural science background and the gender lens is not as pronounced. Additionally, the Ozone gender background document stated that a challenge was the limited availability of qualified women in science and technology areas (Ozone Secretariat, 2019). Hypothetically, one could state that an increased number of women participating in environmental governance could increase the gender-sensitivities of policies and programs. Additionally, the UN Gender and Environment course mentioned a study where forest management groups containing more women demonstrated better results of collaboration, solidarity, conflict resolution, and collective action (UN CC:e-Learn, n.d.).

Linkages to social and environmental issues were also mentioned in the MEA secretariat interviews. This speaks to the intersectional lens which governing bodies can apply in working towards major societal and environmental challenges. Additionally, this was recognized in the Ozone background document where they state that work to date has focused on the environmental and economic aspects of ozone depletion; however, it is time to include the social aspects (especially gender equality and women's empowerment) in the work of the treaties and the 2030 Sustainable Development Agenda including the SDGs (Ozone Secretariat, 2019). This can apply in global pandemic recoveries as well. In forecasting to a green recovery post-COVID-19, the IISD stated "centering and valorizing a care economy, recognizing the role of women;

uprooting the economic and social instruments of white supremacy; and upholding Indigenous Peoples' roles in ecosystem protection, among others [...] will be key to both rebuilding the world economy and preventing future crises" (Allan et al., 2021, p.15). Studies of how women have been impacted by the COVID-19 pandemic are still underway, but from research examined in the literature review for this project, it is clear that gender inequalities have been on the increase.

5.2 Methodology and Limitations

Methodological choices and limitations of the research design of this project are reflected upon in this section. This research project aimed to contribute to the knowledge gap around the major challenges that MEA secretariats face when implementing gender mainstreaming elements in their planning and implementation of the conventions. A qualitative content analysis process was undertaken where data was collected from online sources as well as secretariat interviews. Findings were presented to show a general picture of the major activities and themes in MEA gender action plans, how language choice in the treaty text influences the outcomes of the conventions and depicting challenges and opportunities of MEA secretariats.

In examining the generalizability of this project in relation to other international environmental agreements, it can be questioned how this study of the selected nine agreements inspected could be applicable to other MEAs. Qualitative methods of data collection and analysis can face generalizability issues and even disregard generalizability as a goal altogether (Blaikie & Priest, 2020). With that said, this research had a chemicals and waste focus, however with the inclusion of other environmental issues included in the analysis (biodiversity, climate change, and ozone depletion), there were many overlaps and interconnections. Findings of this study can be applied to other environmental challenges such as land and agricultural conventions as well as marine and freshwater agreements. Some of which are starting to include gender equality as an additional focus area. One caveat as far as generalizability of this research was the inclusion of the SAICM framework which differed substantially from the other agreements. Especially in relation to the number of times women was mentioned in the text itself – coming up seventeen times in comparison to max three times in the other conventions. The choice to include the SAICM text may have skewed the results, however, gaining the secretariat's perspective on the inclusion of a gender lens in the SAICM process was important to glean lessons learned in the larger chemicals governance sphere. The choice to include SAICM in this analysis was prompted by the substantial amount of literature on found on the current SAICM Beyond 2020 process where the global framework is being updated. Multiple informal discussions were had with NGOs working on this framework and the overall impression was that this is a crucial time to include issues of gender equality in this work.

In relation to the **validity** of this research, one limitation was the choice to focus primarily on MEA secretariats as interviewee subjects. This specific focus left out other important stakeholder views such as the NGO and civil society community who are very active in the international environmental governance sphere. Informal conversations were held with these stakeholders, also including academic perspectives, however these were not transcribed or included in the NVivo analysis and therefore not included in the findings and analysis. However, perspectives did play an important role in helping to identify the main focus of the MEA secretariats. Interview perspectives with other UN agencies working on gender equality, such as UN Women or UNDP, would have also increased the nuance of the findings. Plus, gaining perspective from the convention funding bodies (GEF, Multilateral Fund, etc.) would have provided another point of view as far as more detail on the funding and resource availability. The specific focus on the MEA secretariats, however, did provide an in-depth look into the lived experience of the MEA planning and implementation process including a historical background of the inclusion of gender equality aspects. In efforts to increase validity of this

research, triangulation of data sources was obtained in order to establish a justification of the themes used in the analysis process.

As far as research **reliability**, the Methods section detailed a step-by-step process in which the research was carried out. One aspect to note is that the number of gender related documents and publications on the InforMEA database has increased substantially since the beginning of this four-month research project. Additionally, the secretariat interviews revealed that gender action plans are either in the process of being updated or are being completed in many of the conventions. This shows that gender equality inclusions are increasing at an accelerated pace. Thus, if this research is to be replicated again, it is highly anticipated that the number of gender related documents and action plans will have increased. A limitation as far as the reliability was relating to the MEA text gender template screening process. The researcher was not an expert in legal language and no lawyers were consulted in order to test the validity of the gender screening template. Consulting and verifying with a legal expert would have solidified the references of 'slippery negotiation words' and 'hortatory language' usage. However, this was out of the scope of this master's thesis.

The impact of COVID-19 also presented to be a limitation of this research in that (1) there were sometimes difficulty scheduling interviews with secretariats as their workload was very high and (2) some secretariats never responded for an interview or stated that they did not have the capacity to be interviewed for this project. This is an understandable limitation as much of the workplace and areas of everyday life has been impacted by the global pandemic. On the plus side, since the MEA secretariats are located all around the world, online platforms to conduct and record interviews made the data collection smoother than it otherwise would have been. Given the relatively small number of interviewees, publicly available content in the form of webinars and online course supplemented the data collection and triangulation. Additionally, informal conversations with NGOs, academia, and other related stakeholders helped to shape the research design and focus for a well-rounded perspective in addressing the research questions.

6 Conclusions

This thesis set out to obtain an in-depth view of gender equality work in Multilateral Environmental Agreements (MEAs) by examining the characteristics and historical processes of including gender into the conventions. First, the terminology used in MEAs around gender and women was examined. Second, MEA gender actions plans were assessed to locate major activities and themes. Finally, interviews were conducted which identified major challenges faced by secretariats in the planning and implementation process of including a gender dimension in MEAs. This section congregates the findings from the three main research questions and identifies potential gender mainstreaming opportunities. The following research questions were addressed in this thesis:

RQ1: What type of language is used in the texts of selected MEAs in relation to gender mainstreaming?

RQ2: What are the major activities and themes of the MEA gender action plans?

RQ3: What challenges and barriers have MEA Secretariats faced when including gender mainstreaming in the MEA planning and implementation process?

To answer these questions, a qualitative content analysis method was used. Empirical data collected consisted of six MEA secretariat semi-structured interviews, 13 informal semi-structured stakeholder conversations, a literature review consisting of 16 academic articles, 7 books, 49 United Nations (UN) publications (including 9 treaty texts and 4 gender action plans), 14 NGO/intergovernmental publications, and six webinars and one online course.

In regard to the **first research question** examining the terminology used in treaty texts around gender equality, it is clear that the inclusion of a gender lens was significantly lacking in most of the texts with the exception of the Strategic Approach to International Chemicals Management (SAICM) framework. The term 'gender' was not included in any of the agreements examined, but reference to women was more common. This shows that gender terminology and a gender lens had not been integrated into the development of the agreement. In the few references to women, however, most included women as part of a vulnerable population – not as their own agents of change and decision-makers around environmental issues. There were significant differences between the MEA texts and the SAICM global framework. SAICM was the only text that included action-oriented language. Since the framework is non-binding, actionable items without hortatory language or slippery negotiation words were able to be included without significant pushback.

The importance of including gender equality in the text from the beginning was clearly specified by the secretariat interviewees. With UN Women, the UN System-wide Action Plan on gender equality and women's empowerment (UN-SWAP), SDG 5, and other UN agencies incorporating gender equality aspects in their work at an increased rate, it is likely that any new MEAs will take a gender perspective from the outset and existing MEAs will continue to include a gender perspective. To ensure this, increased secretariat staff understanding, and adequate funding and resources is critical. Training, capacity building, and awareness is currently underway. Continuing the gender mainstreaming work within the secretariat is vitally important, as is continuing the discussion of what gender means and what people are referring to when these terms are used. Additionally, the importance of improving communication and awareness on the party side during the negotiation process of any new treaties cannot be overemphasized. MEAs are increasingly implementing gender action plans into aspects of party compliance. Therefore, this should not be a brand-new issue for countries to work on. Parties in the Convention on Biological Diversity (CBD) are also party to the UN Framework Convention on

Climate Change (UNFCCC) as well as chemicals and waste related MEAs. Accordingly, if a new treaty such as one regulating plastic pollution or a global environmental compact comes forth, gender connections have a higher likelihood of inclusion.

The following recommendations for future MEA text development are:

- Include a gender perspective from the beginning of the agreement planning steps. With that said, the importance of gender mainstreaming should be highlighted in the text.
- Include action-oriented language within each of the references to prescribe direct actions to parties and/or the secretariat body. For example, using terminology such as 'shall' or 'ensure' when delineating action items towards parties around gender.
- Treaty text mentions around gender should refer to women as "agents of change", not
 as part of a vulnerable group or population. For example, referring to women as
 leaders in environmental protection efforts, recognizing their impact in the
 community, and as qualified decision-makers.
- Slippery negotiation words and hortatory language should be avoided where possible.
- Linkages to implementation around gender mainstreaming should be crystal clear instead of vague and ambiguous.

The **second research question** uncovered the major activities and themes of MEA gender action plans. Results from the assessment found that there were items directed towards the secretariats and items directed towards parties of the convention. These items included: accountability, baseline and reporting progress, capacity building and decision making, communication and awareness raising, data collection and case studies, effectiveness of the MEA, gender parity, gender equality perspective, gender- or sex-disaggregated data, gender team within the secretariat, implementation, linkages to social and environmental issues, UN system collaboration, funding and resources, larger UN Environment Programme (UNEP) task team, secretariat staff understanding, stakeholder collaboration, and updatability. Overall, the gender action plans assessed in this study showed that there is progress being made on gender mainstreaming in international environmental governance and much thought has gone into the development of the plans, however, there are areas which could be improved upon.

Recommendations for gender action plans include:

- Incorporating accountability measures in the action plans (short-, medium-, and long-term goals) and making sure to specify funding requirements for each action. The detailed goals outlined in the Basel, Rotterdam, and Stockholm (BRS) Convention gender action plan can serve as a model for future action plans to replicate.
- Specifying targets and intended results is helpful for parties and stakeholders in implementation of the action plans.
- Reporting on the effectiveness of the gender action plans will increase accountability and transparency.
- Adding an increased level of detail regarding how often the plan will be updated should be included. This was one area that was lacking in the current plans.
- Increasing communication and awareness measures with stakeholders and the general public regarding the interconnections of the MEA issue and gender equality should be included going forward. Lack of general public understanding was expressed as a concern from a few of the interviewees. This could be an opportunity area for UN Women to conduct further outreach.

- Visibility of gender aspects on some of the secretariat webpages is sufficient but could be increased in others.
- Including the UN-SWAP as a framework to guide the gender action plans may help to increase transferability within the MEAs.

Research question three addressed major challenges and barriers that secretariats have faced in their gender mainstreaming work. Major findings included: funding and resources constraints and challenges around implementation of the gender action plan. Areas of opportunity that came up were stakeholder collaboration and the benefits of working with other actors in the women and environment nexus and others such as the medical field. Perspectives of parties can be a challenge as well as an opportunity at times. For example, when parties working on environmental areas come from a natural science background, the gender connections can at times be more difficult to make. On the other hand, in the chemicals and waste related MEAs, there was a more straight-forward connection to women and chemical exposure so that parties did not question the inclusion of gender aspects in the treaty. It is clear that there is motivation to include a gender perspective in each of the MEAs researched in this project and that the efforts to collaborate and reduce duplication of work is there.

Recommendations for MEA secretariats to add to their gender mainstreaming work is as follows:

- Ensure gender mainstreaming goals are introduced in the beginning stages of new MEAs. Including the goals as an add-on element later in the process may make the work more difficult.
- Prioritize funding for gender mainstreaming within the UN system. For example, obtaining funding for pilot projects may demonstrate the viability of the work that parties are doing around gender equality similar to the BRS Gender Heroes pilot projects in 2017.
- Providing adequate resources to continue gender mainstreaming work within the secretariat is an important element to continue building upon the progress made. Each MEA secretariat should have at least one gender expert or gender focal point working on gender mainstreaming within the secretariat as well as assisting parties and stakeholders outside of the secretariat. Of course, this is dependent on funding which was previously listed as a constraint. The work of the larger UNEP gender task team has begun in 2021 and should continue to further build upon what has been accomplished so far.
- Supply training and capacity building elements to the task team, in order to increase secretariat staff understanding.
- Increase collaboration within the UN system specifically with UN Women in order to avoid duplication of efforts and mainstreaming gender throughout the MEAs.

Intersectionality has been considered in the gender mainstreaming work within the secretariats. This was made evident when interviewees highlighted examples of gender intersecting with social and economic aspects in relation to the environmental challenge the MEA addressed. Linkages between gender equality and environmental and societal issues came through in the gender action plan reviews as well; however, there are still some gaps. For instance, looking at the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs), there were six goals which did not include any gender indicators, and the majority of target indicators were listed in SDG 5 which is directly addressing gender equality. It would be beneficial for each SDG to include an outline of intersections with potential gender impacts. Also, centering Indigenous People's voices and community knowledge is important to consider in environmental protection efforts. Additionally, continuing the gender parity work within the

MEAs is important for an increased level of women's participation in environmental governance. Including gender-diverse people in scientific studies and policies is another important aspect to consider in the environmental sector which is currently underlooked.

Larger systemic challenges continue to impede gender equality goals. Gender norms and stereotypes such as disregarding the informal sector and unpaid labor needs to be addressed. Especially building back from the COVID-19 pandemic where a significant number of women have taken on an increased caretaking role and had to leave their regular working positions in the workforce. Gender-responsive and gender-transformative policies are needed to recover from the damage caused by the global pandemic. These systemic issues cannot be solved solely by the MEA gender mainstreaming work, but international agreements can make an important impact on national policies working towards a more sustainable and just future.

Regarding outside stakeholder collaboration, MEA secretariats can recommend that organizations working on women's issues and gender equality convene periodically to align on their top-priorities to address in order to avoid such a large number of requests which could dilute the efforts. Continuing to promote women in the STEM fields in academia and career paths is another initiative relating to women and science that is worth exploring. Additionally, MEA secretariats who have worked on gender issues within the conventions can collaborate with NGOs to increase public awareness on these issues. For instance, the BRS and SAICM secretariats both presented in a 2020 webinar series that the MSP Institute held on gender and chemicals. Or the UNEP gender task team could produce a video or webinar series on how gender issues are related to environmental governance in efforts to continue to increase public awareness.

A major question examined in this research was the discussion around gender mainstreaming in chemicals agreements in comparison to other environmental agreements. This study hypothesized that gender equality aspects could be applicable across different environmental categories. Multiple informal stakeholder discussions confirmed that the chemicals and waste sector was relatively new to including gender equality considerations compared to the climate change or biodiversity sectors. From the secretariat interviews in the chemicals MEA cluster, there seemed to be clear linkages between gender and chemical exposure, particularly with the Minamata Convention and mercury pollution. Overall gender- and sex-disaggregated data was lacking, but this does not seem to be heavily impeding progress on the need to include a gender perspective. Interestingly, in the two chemicals related gender action plans (the BRS plan and the Minamata draft gender mainstreaming document) gender- or sex-disaggregated data was not mentioned. However, this data was brought up by the other two action plans - the CBD and UNFCCC. The literature review around gender and chemicals reinforced that there is a substantial need for increased sex-disaggregated data, especially highlighted by the NGO community. Thinking back to the UN Global Chemicals Outlook II (2019) report where it was estimated that only 500 of the 100,000 plus chemicals in commerce had robust scientific information on their risks, hazards, and exposure characteristics, it is apparent that additional studies are needed on the safety of chemicals in commerce and sex-disaggregated data should be of focus moving forward. Overall, the hypothesis stated in the beginning of this thesis regarding the applicability of gender mainstreaming aspects from other environmental areas to the chemicals field turned out as expected. Of course, different environmental challenges have their respective solutions, but as a whole, gender equality aspects did apply and have interconnections to each issue of the MEAs.

The literature review confirmed that many NGOs and intergovernmental organizations are making distinct connections between gender and chemicals and calling for increased data on exposure. Thinking about why the chemicals cluster has only started to address gender equality

issues more frequently, is that perhaps climate change and biodiversity are issues are making news headlines more often and are more directly visible (floods, fires, other natural disasters, etc.). The chemicals sector is not as front news page worthy often times; however, environmental injustices and chemical exposures have been reported for many years. Chemicals are also often hidden from plain sight – many have no smell, color, and are not able to be seen by the human eye. They can cause long-term health impacts which need decades of scientific studies to prove a chemical is unsafe for use. These various reasonings could be an explanation of why the gender and chemicals discussion is less developed than gender and climate.

A contribution of this research project is that it examined a variety of different MEAs on multiple environmental topics which allowed for comparisons of their progress on gender mainstreaming activities. The interview focus on MEA secretariats contributed to an overall picture of the challenges faced and how to best avoid duplicating efforts around this work in the future. A series of opportunity areas were suggested for consideration in future treaties, updating gender action plans, as well as recommendations for future research angles which is presented in the following section.

6.1 Recommendations for Future Research

International agreements can be implemented and interpreted in different ways by different ratifying countries. One challenge area concerning MEAs involves the national implementation of the agreements. Some argue that governments suffer from a lack of regulation capacity to implement the agreement requirements. Developing countries have a particularly challenging time, due to lack of sufficient funding and technical and regulatory capacity (Yang, 2015). However, some national and local governments are taking significant action by limiting exposure of harmful chemicals in order to protect the health of citizens and the environment while including a gender lens in the process. While acknowledging that international environmental agreements set overarching aims and targets to meet, it is up to the ratifying party to determine how the country will implement the requirements of the agreement. An in-depth national study would require additional time and resources and was out of the scope of this research. However, results and lessons learned from countries implementing these MEAs may prove useful by identifying which areas worked, as well as those that did not.

Future research to further complement the findings of this study could examine the perspective of other stakeholders involved around gender issues and MEAs. For example, NGOs often collaborate with secretariats to publish informational reports and have been vocal in the multilateral negotiation process. A stakeholder exploration and mapping exercise could result in the coordination of external voices to push their agenda further, i.e., to mitigate the risk of important inputs getting lost on the secretariat agendas. Interviewing other stakeholders such as civil society, academia, intergovernmental organizations could broaden the vision by incorporating more perspectives than the secretariat angle which this research focused on.

Studying the interrelationships between funding mechanisms and MEA projects could provide another avenue for future research. As touched upon in this thesis, funding mechanisms (GEF, Green Climate Fund, Multilateral Fund, etc.) can play an important part in MEA and gender equality work at the national level. This research did not primarily focus on funding and resources. It did, however, recognize that funding levels impact how parties implement projects.

Researching how and where gender- and sex-disaggregated data are utilized in environmental policies and programs would provide valuable insight into decision-making. Inquiries into what types of data is required and for what scientific studies could be helpful in addressing the underlying challenge of why the environmental sector is lacking this data. In other words, policymaking and programs could potentially benefit by first understanding what problem they

are trying to solve. This study could be done from an international policy lens, or even a national angle taking a deep dive into one country and examining where they are collecting this data and what areas are lacking. This is a great way to engage the medical community as was mentioned by the SAICM secretariat during the interview. Perhaps, if there were requirements for all studies to include data on men, women, as well as gender-diverse people and their exposures to chemicals, we could have a better picture of how to create and implement international policies and programs while including a gender perspective.

Another potential research opportunity with a focus on environmental governance could investigate how global pandemics such as COVID-19 have an impact on gender equality. Specifically viewing this issue from a chemicals and waste lens is an imperative angle to study if we want to achieve a more just society when rebuilding from detrimental global pandemics. Exploring if and how gender inequalities are exacerbated with the social, economic, and environmental impacts of global pandemics will be an important area of study in the working to achieve gender equality goals in SDG 5 for example.

In conclusion, this research project completed an in-depth examination of gender equality aspects in the global environmental governance system specifically with a focus on MEAs. Terminology of mentions around gender and women were discussed, gender action plan activities and themes were delineated, and challenges faced by MEA secretariats were uncovered in the interview process. Opportunities for improvement of gender mainstreaming efforts within the MEA system were suggested and future research angles were identified. Overall, gender mainstreaming work is ramping up in the chemicals and waste related MEAs and lessons learned by the integration of a gender lens in the climate and biodiversity MEAs has been incorporated in the newer chemical related MEA work.

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Appendix A

The following search terms were used to gather data for the literature review:

Preliminary search terms:

- Gender mainstreaming + policy + environment
- Women + chemical exposure + policy
- Gender + chemical exposure
- Gender + occupational health
- Gender impact assessment + policy

After identifying main concepts in this field new terms and combinations were searched:

- Socialization theory + gender mainstreaming
- Gender mainstreaming + gender impact assessment
- Gender mainstreaming + women + chemical exposure
- Gender mainstreaming + governance + international
- Gender mainstreaming + policy + barriers
- Women + human rights + environmental health
- Women + climate change + environmental health
- Gender sensitive + policy
- Gender analysis + strategies
- Gender analysis + environmental + policy
- Women + international + hazardous chemicals
- Women + occupational health + chemicals
- Gender perspective + environment
- Gender sensitive + environment + policy
- Gender dimensions + hazardous chemicals
- Gender dimensions + international agreement

A focus on Multilateral Environmental Agreements was decided upon and the following terms were searched:

- Multilateral Environmental Agreements + gender
- Multilateral Environmental Agreements + women
- Multilateral Environmental Agreements + chemicals
- Multilateral Environmental Agreements + climate change
- Multilateral Environmental Agreements + biodiversity
- Multilateral Environmental Agreements + ozone depletion
- Multilateral Environmental Agreements + gender equality
- Multilateral Environmental Agreements + gender focal point
- Multilateral Environmental Agreements + inequalities

Appendix B

Interview Guide

Questions for MEA Secretariats:

- 1. I'm interested in learning more about how gender aspects have been integrated in the MEA:
 - a) How the negotiations went? What was the process of inclusion like?
 - b) Who were the stakeholders involved in this process?
 - c) Is it an ongoing discussion or happened during a specific COP meeting?
- 2. (Specific to MEAs with gender action plans)
 - a) How was the gender action plan developed?
 - b) Is the plan updated periodically?
- 3. Going forward, how do you see the integration of gender aspects in this MEA?
 - a) Are there plans for further discussion? Pilot projects, etc.?
- 4. Has gender-diversity (transgender, non-binary, etc.) been brought up around the discussions of gender inclusions in the agreement?
- 5. What other ways besides MEAs do you see as opportunities to address gender issues in the environmental field? For example, future collaboration with other stakeholders in this area?
- 6. Main lessons learned/to-do/not-to-do based on your perspective.

Questions to stakeholders (non-governmental organizations, intergovernmental organizations, academia, etc.) working around gender and environmental governance:

- 1. How is your organization working on the issue of gender and environmental issues in relation to Multilateral Environmental Agreements (MEAs)?
- 2. If you are or have been involved with working on gender development aspects within MEAs development/implementation/organization what in your perspective are the major challenges to advancing the gender agenda from the MEA angle?
 - a. What are some examples of ways you have addressed these barriers and challenges?
- 3. How can gender be mainstreamed in MEAs and their Conference of the Parties decisions in the future?
- 4. What are your thoughts on how ratifying parties to MEAs with a gender aspect have been in implementing this gender aspects?
 - a. Are there major issues with implementing gender protections that the MEAs suggest/require from a national implementation level?
 - b. What opportunities or concrete existing mechanisms a country could utilize to work towards addressing gender equality?
- 5. What other organizations are you working with around gender issues?
- 6. What other ways besides MEAs do you see as opportunities to address gender issues in the environmental field?
 - a. What role do you see for future collaboration with other stakeholders around gender and environmental work?

Appendix C

Results for 'gender' in the InforMEA database under All Categories (including communications, publications, proceedings, global strategies, and others) (1995-2021).

Treaty	Number of results for 'gender'
Basel Convention on the Control of Transboundary	353
Movements of Hazardous Wastes and their Disposal	
United Nations Framework Convention on Climate	291
Change	
Stockholm Convention on Persistent Organic	287
Pollutants	
Rotterdam Convention on the Prior Informed	124
Consent Procedure for Certain Hazardous	
Chemicals and Pesticides in International Trade	
Convention on Biological Diversity	68
Ramsar Convention or Convention on Wetlands of	68
International Importance	
Kyoto Protocol to the United Nations Framework	65
Convention on Climate Change	
Paris Agreement to the United Nations Framework	21
Convention on Climate Change	
United Nations Convention to Combat	18
Desertification	
United Nations Environment Assembly	7
Convention on Migratory Species	4
Minamata Convention on Mercury	4
Cartagena Protocol on Biosafety to the Convention	3
on Biological Diversity	
Strategic Approach to International Chemicals	3
Management	
Montreal Protocol on Substances that Deplete the	2
Ozone Layer	
Convention on International Trade in Endangered	1
Species of Wild Fauna and Flora	
International Plant Protection Convention	1
Nagoya Protocol on Access to Genetic Resources	1
and the Fair Equitable Sharing of Benefits Arising	
from their Utilization to the Convention on	
Biological Diversity	
Vienna Convention for the Protection of the Ozone	1
Layer	

Source: Author's own creation from InforMEA database results accessed May 4, 2021.

Appendix D

Screenshot of MEA text example showing 'gender' in the sidebar of the text.

ARTICLE 10 Public information, awareness and education

1. Each Party shall, within its capabilities, promote and facilitate:

capacity building, public awareness

- (a) Awareness among its policy and decision makers with regard to persistent organic pollutants;
- (b) Provision to the public of all available information on persistent organic pollutants, taking into account paragraph 5 of Article 9;

access to information

- (c) Development and implementation, especially for women, children and the least educated, of educational and public awareness programmes on persistent organic pollutants gender health as well as on their health and environmental effects and on their alternatives;
- (d) Public participation in addressing persistent organic pollutants and their health and environmental effects and in developing adequate responses, including opportunities for providing input at the national level regarding implementation of this Convention;

public participation

Source: Stockholm Convention Treaty Text. Accessed from https://www.informea.org/en/treaties/stockholm-convention/text