

Measuring Women's Participation in Environmental Decision-Making:
An Analysis of National Reports to the Ramsar Convention

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A thesis

submitted in partial fulfillment of the
requirements for the degree of

Master of Marine Affairs

University of Washington

2015

Committee:

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Program Authorized to Offer Degree:

Marine and Environmental Affairs

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Abstract

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Gender inequities in marine and environmental management restrict women's access to benefits at all levels, perpetuating poverty and undermining sustainable resource use. However, gender equity in this field is neither widely written into policy nor widely measured. In collaboration with the IUCN Global Gender Office, this study investigates reporting on women's participation in management of protected marine and coastal wetlands. Using National Reports to the Ramsar Convention, a widely-ratified treaty that protects 916 marine and coastal wetlands worldwide, I define the frequency, context, and tenor of discussions of gender and women's participation in conservation of these marine ecosystems and their resources. Keyword searches show that less than 16% of reports mention women or gender, and mentions of keywords relating to women decreased by approximately 90% between 1999 and 2015. These keyword mentions most frequently characterize women as stakeholders on national wetlands management committees, as

indistinct from other subgroups often excluded from access to decision-making arenas, and as beneficiaries of sustainable development programs. Despite these findings, most Ramsar National Reports' discussions of women lack sufficient detail for understanding cumulative progress toward gender equity in management. This study suggests that a) greater detail in reporting and b) establishment of mechanisms that measure long-term or cumulative progress toward equitable participation of women would help improve our understanding of gender equity in marine ecosystems management.

Definitions

- Gender a process of judgment and value (a social hierarchy) related to stereotypes and norms of what it is to be *masculine* or *feminine*, regardless of assigned sex category (Fletcher, 2015); a means of understanding how society operates through the study of the negotiation of power roles and influence between men and women; a description of the spheres around which society operates (Bennett, 2005)
- Governance the interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken and how citizens or other stakeholders have their say (Graham, Amos, & Plumptre, 2003)
- Wise use the maintenance of ecosystems' ecological character, achieved through the implementation of ecosystem approaches, within the context of sustainable development, for the benefit of people and nature (Ramsar Convention Secretariat, 2005)

Introduction

Women participate significantly in the use and management of marine ecosystems worldwide as fishers and processors. However, gender inequities restrict women's access to benefits at all levels, from formal employment to policy- and decision-making processes (Weeratunge, Snyder, & Poh, 2010; The World Bank, FAO, & IFAD, 2009). These inequities perpetuate poverty, risk women's health and wellness, and undermine sustainable resource use (BMZ, & Future-Makers, 2012; Weeratunge, Snyder, & Poh, 2010; The World Bank, FAO, & IFAD, 2009).

National and global policies governing wise use of marine ecosystems, biodiversity, and resources (e.g., FAO, 2013; Ramsar Convention Secretariat, 1996, 2002, 2008, 2015b) have historically not prioritized the needs of women, marginalizing them from participation in the planning, implementation, and benefits of such policies (e.g., Bennett, 2005; Lentisco & Lee, 2015; Mitleton-Kelly, 2015). Recently, though, institutions influencing global marine conservation and development have included meeting women's needs in strategic plans like the Aichi Biodiversity Targets and the Sustainable Development Goals. In the past five years, global conservation treaties have begun to embrace the goal of gender equity (Ramsar Convention Secretariat, 2015b; Secretariat of the Convention on Biological Diversity, 2011), which includes ensuring that men and women equitably bear costs and reap benefits of conserving and managing resources, as well as ensuring equitable access to decision making and to the conserved resources themselves. Academic literature on gendered access to marine resources and decision-making also notes the lack of women's participation and calls for improvement in this area (see Chapman, 1987; DiCiommo & Schiavetti, 2012; Kronen & Vunisea, 2007; Walker & Robinson, 2009). Despite these acknowledgements, gender equity in marine ecosystem management is neither widely written into policy nor widely measured, perhaps because its recognition as a goal for the conservation community is quite recent.

The Environment and Gender Index (EGI), a product of the International Union for the Conservation of Nature's (IUCN) Global Gender Office (GGO), is one effort to analyze gender equity in environmental management (IUCN GGO, 2015). In 2013, the EGI's pilot used 27 indicators to measure gender equity in the areas of rights, education, governance, livelihoods, ecosystems, and country-reported activities for 73 countries. The next phase of the EGI will use indicators measuring women's participation in conservation and management of protected areas. It will include sites on the List of Wetlands of International Importance established by the Convention on Wetlands ("the Ramsar Convention"), a widely ratified treaty that protects 916 marine and coastal wetlands worldwide (Ramsar Convention Secretariat, 2015a; Ramsar Sites Information Service, 2015). The IUCN GGO collaborated in developing this study's design and its premise as a preliminary contribution to the next phase of the EGI's protected areas-related indicators.

In this study, I investigate reporting on women's participation in management of protected marine and coastal wetlands. Using National Reports to the Ramsar Convention, I define the frequency, context, and tenor of discussions of gender and women's participation in conservation of these marine ecosystems and their resources.

Gender and Wise Use of Marine Ecosystems and Resources

Gender, ecosystem management, and policymaking have long been acknowledged as cross-cutting issues (Aguilar, Castaneda, & Salazar, 2002; Levy, 1992). Women's contribution to food security and economies through participation in the fisheries sector is being documented worldwide (Harper, Zeller, Hauzer, Pauly, & Sumaila, 2013; Weeratunge, Snyder, & Poh, 2010; The World Fish Center, 2010), allowing better recognition of the dynamics among women resource users, development, and degradation of the marine environment. Women are estimated to comprise 47% of the labor force in the global fisheries sector (Weeratunge, Snyder, & Poh, 2010) and contribute more than 56% of small-scale fisheries catches in the Pacific region alone (Harper, Zeller, Hauzer, Pauly, & Sumaila, 2013). Through these activities, women actively participate in the population of 200 million people who depend on the marine resources sector for employment and provide food security for many others (The World Bank, FAO, & IFAD, 2009).

Among marine ecosystem users, however, gender disparities exist at all levels. Though reliable global data are unavailable, case studies have shown that women may be:

- often relegated to informal fish processing jobs and paid less than half of what men are paid for these jobs (Nishchith, 2001; The World Bank, FAO, & IFAD, 2009; Zhao, Tyzack, Anderson, & Onoakpovike, 2013);
- less able than men to access and control capital, information, organizing capacity, healthcare and other assets (Bennett, 2005; The World Bank, FAO, & IFAD, 2009; Zhao, Tyzack, Anderson, & Onoakpovike, 2013); and
- often less active than men in management, decision making, and broader governance of marine resources and ecosystems (Bennett, 2005; Chapman, 1987; Weeratunge, Snyder, & Poh, 2010; The World Bank, FAO, & IFAD, 2009; The World Fish Center, 2010; Zhao, Tyzack, Anderson, & Onoakpovike, 2013).

The lower social and economic status of women in fisheries can also have severe consequences for public health. Women's economic vulnerability in Lake Malawi and in Kenyan Lake Victoria, for example, has driven "fish-for-sex networks," in which women fish traders exchange sex with fishermen to receive zero- or low-priced fish. The gendered power relationships of these transactions jeopardize women's ability to engage in protected sex and increase populations' vulnerability to HIV/AIDS (Bene & Merten, 2008; MacPherson, et al., 2012). Each of these factors reduces women's capacity to escape poverty and perpetuates gender inequality in the use of marine ecosystems.

Finally, undervaluing women's contributions to overall use of marine environments will hinder long-term, wise governance of these ecosystems and reduce their ability to support communities; overexploitation of marine resources and inequitable socio-institutional conditions— including issues of gendered access to resources— both contribute to continued poverty in fishing communities (Bene, 2003). Further, case studies of forest conservation show that women's leadership in management brings both social and environmental benefits: reduced conflict and improved conservation outcomes (Agarwal, 2009; Coleman & Mwangi, 2013). Considering these factors, wise, equitable use of marine ecosystems is both increasingly urgent and

increasingly recognized to include meeting the social needs of communities and vulnerable subgroups such as women (e.g., Bennett, 2005; Kronen & Vunisea, 2007; Levine, Richmond, & Lopez-Carr, 2015; Mascia, Claus, & Naidoo, 2010; Ramsar Convention Secretariat, 2005).

The Importance of Measuring Women's Participation in Wise Use of Ecosystems

As described previously, there is an emerging focus on gender in both academic and institutional communities influencing marine policy. Participation of women, as a distinct subgroup, in policy making and implementation is a key aspect of governance, which Graham, Amos, and Plumptre define as “the interactions among structures, processes and traditions that determine how power and responsibilities are exercised, how decisions are taken and how citizens or other stakeholders have their say” (2003). An understanding of governance of marine ecosystems is especially important in measuring gender equity because a) governance is a driving force in effective and efficient management, and b) governance determines the appropriateness and equity of decisions (Borrini-Feyerabend, et al., 2013); both of these factors are important in minimizing social conflict around resource management.

This study considers women's participation in decision making to be an aspect of marine ecosystem management within the overall governance framework. Management can be defined as the ground-level operation of conservation and “wise use” programs within the context of strategies, policies, processes, and procedures that are determined by the governance system (adapted from IEG-World Bank & DAC Network on Development and Evaluation, 2007). Knowing whether and how women participate in marine ecosystem management will provide significant insight into the efficiency of management, the equity of decisions, and the power women have over resources on which they depend.

Assessment and Evaluation of Gender Equity in Wise Use of Ecosystems

Many assessments of marine ecosystem governance have evaluated the extent of public participation in policy planning and implementation, and few of those have included gender analysis. This section draws primarily on literature regarding public participation in decision-making for management of marine protected areas (MPAs) worldwide. While marine protected areas are only one model of marine ecosystem management, they operate with a wide variety of goals and management structures (Agardy, et al., 2003) and provide a good basis for understanding what knowledge has been gained by studying communities' participation in decision making in the past.

Early assessments of MPA management studied the extent of public participation in MPA planning to assess social impacts of marine reserves (e.g., Christie, 2004; Cocklin, Craw, & Mcauley, 1998; Suman, Shivilani, & Milon, 1999). These studies recommend that public participation in planning and management be sought as early and comprehensively as possible. Notable for its explicit critique of social impacts, a 2004 case study of MPA governance found that a selection of Southeast Asian MPAs simply failed to meet the needs of the communities involved (Christie, 2004). This study identified three social indicators affecting an MPA's success: a) extent of broad stakeholder participation; b) the presence of mechanisms for equitable sharing of economic benefits, whether formal or informal; and c) the presence of conflict-

resolution mechanisms. Drivers of conflict included inequitable distribution of economic benefits and hostility between community groups and entities responsible for enforcement of regulations. The study concluded that social harmony within the MPA management system *determines* whether the MPA will be ecologically successful in the long term. A similar 2010 case study identified several alternative but socially effective forms of MPA governance, including incidental forms of protection, myths or taboos preventing use of certain marine areas, and newly emergent non-formal rules adhered to from a sense of social obligation (Glaser, Baitoningsih, Ferse, Neil, & Deswandi, 2010). These forms of governance are notable because not only do they involve greater public participation than many of the strategies identified by the earlier articles, but they are also often initiated by the public itself. These early assessments of public participation in marine governance illustrate the field's scope of interest widening to include social issues rather than solely ecological ones. Though they establish the importance of social harmony for long-term ecological success of marine ecosystem management, they are largely silent on issues of equity and gender.

Despite this evidence of the shift toward more critical thought on human dimensions of marine ecosystem governance, gender equity and involvement of women in policy planning are rarely researched. Only a few case studies have discussed participation of women in decision-making about marine resources, and these studies conclude that women do not have equitable access to decision-making. A 2012 case study of an MPA in Brazil found issues of gendered access to participation during management meetings, and its authors make clear policy recommendations aimed at facilitating equitable access; these include overcoming mistrust in management entities by ensuring equal pay, establishing support networks for ecosystem users who are women, and adding issues of importance to women's groups to decision agendas (DiCiommo & Schiavetti, 2012). Similarly, a 2009 case study of MPA management in French Polynesia found that though men and women exhibited similar patterns of marine resource use, there was gendered participation in planning and management: men were both more vocal at meetings and more likely to attend meetings than were women (Walker & Robinson, 2009). Unlike these case studies, this study attempts to assess the global scale of women's participation in decision-making for Ramsar-listed marine and coastal wetlands.

The Ramsar Convention

International organizations have an opportunity to modify existing institutions to help rectify these issues of gendered access; doing so will improve long-term conservation, poverty reduction, and broader gender equality. One such institution is the Ramsar Convention, which was adopted in 1971 to support "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world" (Ramsar Convention Secretariat, 2015b). The Ramsar Convention currently has 169 Contracting Parties (CPs) and has listed 2,220 sites on its List of Wetlands of International Importance; sites must meet one of nine criteria based on wetland representativeness, rarity, or uniqueness, or the importance of biodiversity conservation (Ramsar Convention Secretariat, 2014a). Of all listed sites, 916 are classified as marine or coastal wetlands, which include coastal shores, marshes, shallow marine waters, intertidal flats, coastal lagoons and forests, estuaries, marine subtidal beds, coral reefs, and subterranean hydrological systems (Ramsar Sites Information Service, 2015). The text of the Ramsar Convention itself

focuses on ecological conservation of wetlands and does not require implementation strategies to consider social or gender equity. However, the objectives of its four successive strategic plans implemented since 1997 include active and informed participation of women as well as wetland restoration that accounts for the needs of women, among other community groups (Ramsar Convention Secretariat, 1996, 2002, 2008, 2015b).

The Ramsar Convention is appropriate for this analysis because it acknowledges human use, rather than solely conservation, of natural resources; in this regard, it differs from other conservation and environmental protection conventions like the Convention on Biological Diversity and the World Heritage Convention. Further, it defines wise use of resources as being explicitly “for the benefit of people” (Ramsar Convention Secretariat, 2005), so the activities and policies used to implement this convention should benefit the communities involved. Considering these ideas and the objectives expressed by the convention’s strategic plans, this study aims to describe the level of gender equity in marine and coastal wetland management conveyed in national reports to the Ramsar Convention. CPs to the Ramsar Convention submit reports detailing national implementation of the convention approximately every three years, and these reports are the unit of analysis for this study.

Context and Research Questions

This study analyzed the extent and nature of reporting on women’s participation in management of Ramsar-listed marine and coastal wetlands. Its goal was to gain a better understanding of gender dynamics in past and present implementation of the Ramsar Convention, particularly through activities that have been planned or conducted to address participation of women in decision-making. My research questions were as follows:

Research Question 1:

With what frequency is women’s participation in management of marine and coastal wetlands discussed? Does this frequency change over time?

This question explores patterns in how often reports discuss women’s involvement in policy creation and implementation through participation in decision making. Frequency of discussion of women’s participation may increase over time in response to growing institutional and academic acknowledgement of the need for greater equity in this aspect of governance.

Research Question 2:

How are women characterized through this discussion? What common themes emerge in the reports’ discourse on women’s participation?

This question seeks to describe and evaluate discourse on women’s roles in marine wetlands management.

Methods

Sampling: Ramsar National Reports

This study examines formal reporting on participation of women in marine wetlands management through the Ramsar Convention's system of National Reports. These reports follow a standardized format and usually require simple "yes," "no," or "somewhat" answers to questions for tracking of completed and planned conservation, education, and evaluation activities. The report format also asks CPs to explain reasons for their answers and elaborate on planned and implemented wetlands conservation activities.

National Reports' content varies by year because the Strategic Plans' objectives and requested actions have evolved over time (Ramsar Convention Secretariat, 1996, 2002, 2008, 2015b). The first Strategic Plan (1997-2002) identified 125 actions CPs should consider taking to meet eight General Objectives fulfilling the mission of the Ramsar Convention. Notably, one of these actions was to involve local community groups, including women's groups, on wetland management committees (Ramsar Convention Secretariat, 1996). Similarly, the second Strategic Plan (2003-2008) identified objectives and actions to meet the convention's mission. However, the second plan decreases specificity in its attention to participation of women: while one of its objectives simply encourages active participation of women in conservation and wise use of wetlands, no action is dedicated to involving women (Ramsar Convention Secretariat, 2002). The third (2009-2015) and fourth (2016-2024) Strategic Plans remove mention of women's involvement altogether. According to the third Strategic Plan (2009-2015), this evolution reflects CPs' desire to streamline actions and focus on "the most important priorities for most Parties" (Ramsar Convention Secretariat, 2008, 2015b). It follows that actions to include women in wetlands management were determined not to be a priority among most CPs.

Triennially since 1999, CPs have submitted National Reports that measure progress toward the convention's operative Strategic Plan for that triennium. Thus, a series of six National Reports (1999, 2002, 2005, 2008, 2012, and 2015) exist for most CPs that acceded to the convention before 1999. The reports were selected as the unit of analysis for this study because their standardized nature allows consistent comparison in reporting on women's participation across CPs and over time. Of 813 National Reports available, I excluded those submitted by CPs without marine and coastal wetlands. This restricted the sample set to 604 reports by 119 CPs in which marine and coastal Ramsar wetlands are located. Because some reports were submitted in multiple parts or with annexes, I considered all documents submitted by a single CP in a single year to be one report. Overall, I analyzed 553 reports submitted by 119 CPs. Reports were published in English, French, and Spanish.

Data Collection and Analysis

I gathered National Reports from the Ramsar online library (Ramsar Convention Secretariat, 2014b), and I used MaxQDA qualitative data analysis software, provided by the IUCN GGO, to create the document database and conduct the following analysis (VERBI GmbH, 2015).

I measured discussion of women's participation and gender equity by counting mentions of gender-related keywords in each National Report. I used the IUCN GGO's gender keyword dictionary to define a set of 68 unique English, Spanish, and French terms grouped into eight broader categories: "gender," "sex," "female," "woman," "women," "girl," "equity," and "equality" (IUCN GGO, 2015). The dictionary included multiple forms of keywords in these categories to ensure counting every mention; for example, the words "gender," "genders," "gendered," and "gender-based" were included in the search, among others, to capture all instances of gender-related discussion.

Once I established these 68 keywords of interest, I used MaxQDA to count mentions of each keyword in all 553 documents. Initial counts using the software's DictioCode function revealed the number of keyword mentions in each report. I then reviewed each keyword mention to determine whether its context fit within this discussion of women's participation and gender equity in wetlands management, and I adjusted each document's keyword counts to exclude mentions not relevant to this discussion. For example, I excluded mentions of "female" from the analysis when they referred to animals rather than to women, and I excluded mentions of "equity" and "equality" that did not refer to gender equity. I also adjusted each document's keyword count to correct for mentions of "women" that appeared in the National Report's questions rather than in CPs' answers. Final keyword mention counts for each report, then, reflected keyword mentions both attributable to CP volition and relevant to this discussion. I tabulated this final set of keyword counts to determine the overall frequency of mentions and identify changes in frequency over time and by region.

Next, I used a context analysis framework, also developed by the IUCN GGO, to describe the different contexts in which the reports discussed women and gender. Part A of this framework identifies four key themes in which women may be characterized: as vulnerable; as beneficiaries of policies or programs; as stakeholders; or as agents of change. When appropriate, I used these themes to code each keyword mention in the dataset. I iteratively coded mentions as "vulnerable" when they discussed women's vulnerability to harm; "beneficiaries of policies or programs" when they discussed women-oriented programs or activities that included women as recipients of economic, social, or other benefits; "stakeholders" when mentions discussed women as decision-makers or as a group targeted for participation in decision-making; and "agents of change" when women were described as driving conservation activities or having a voice in policy change (Markham, 2012). The framework also provides insight into the kinds of activities reported; whether reported activities are planned or implemented; whether reports discuss monitoring of gender-related activities; and whether reports describe activities' contribution to gender equity or women's empowerment. This exploratory first analysis of Ramsar National Reports focuses only on Part A of the framework, which is provided in Table 1 below.

Table 1. IUCN GGO EGI-developed context analysis framework.

A. How are women viewed?	Vulnerable	Are women characterized as vulnerable?
	Beneficiaries	Are women characterized as beneficiaries of policies or programs?
	Stakeholders	Are women characterized as key stakeholders?
	Agents of Change	Are women characterized as agents of change?
B. Reporting of Activities	Specific Activities	Are activities related to gender or women described?
	Kind of Activity	What kind of activity was reported?
	Planned or Implemented	Is the activity planned or already implemented?
	Future Improvement	Does the report mention the need for more involvement of women or more actions to involve women in the future?
C. Gender Analysis	Gender Analysis	Is a gender analysis included?
	Monitoring and Evaluation	Is assessment, monitoring, or evaluation of gender-specific activities mentioned?
	Implementing Agencies	Are women's rights or gender-specialized institutions acknowledged as implementing partners?
D. Contribution to Equality	Does the report explain how the action will contribute to gender equality or the empowerment of women?	

Findings and Discussion: Textual Analysis of Ramsar National Reports

Frequency of Keyword References

Within the 553 documents studied, 195 total mentions of the keywords were made. These mentions appeared in 87 documents (15.8% of the total set of documents) submitted by 50 of the 119 CPs (42% of CPs submitting documents to the dataset). Mentions of all keywords peaked in 2002 at 66 mentions and decreased by greater than 90% to only seven mentions in 2015. Over all years, the keywords “women,” “woman,” “female,” and “girl” were mentioned most frequently with 152 mentions (78% of total keyword mentions), while reports contained 32 (16% of total keyword mentions) and 11 (6% of total keyword mentions) mentions of “gender” and “sex,” and “equality” and “equity,” respectively. Figure 1 graphically represents incidence of gender-related keywords between 1999 and 2015. Table 2 tabulates keyword mentions for each keyword category, year, and region.

Figure 1. Incidence of gender-related keywords in Ramsar National Reports at three- or four-year intervals between 1999 and 2015.

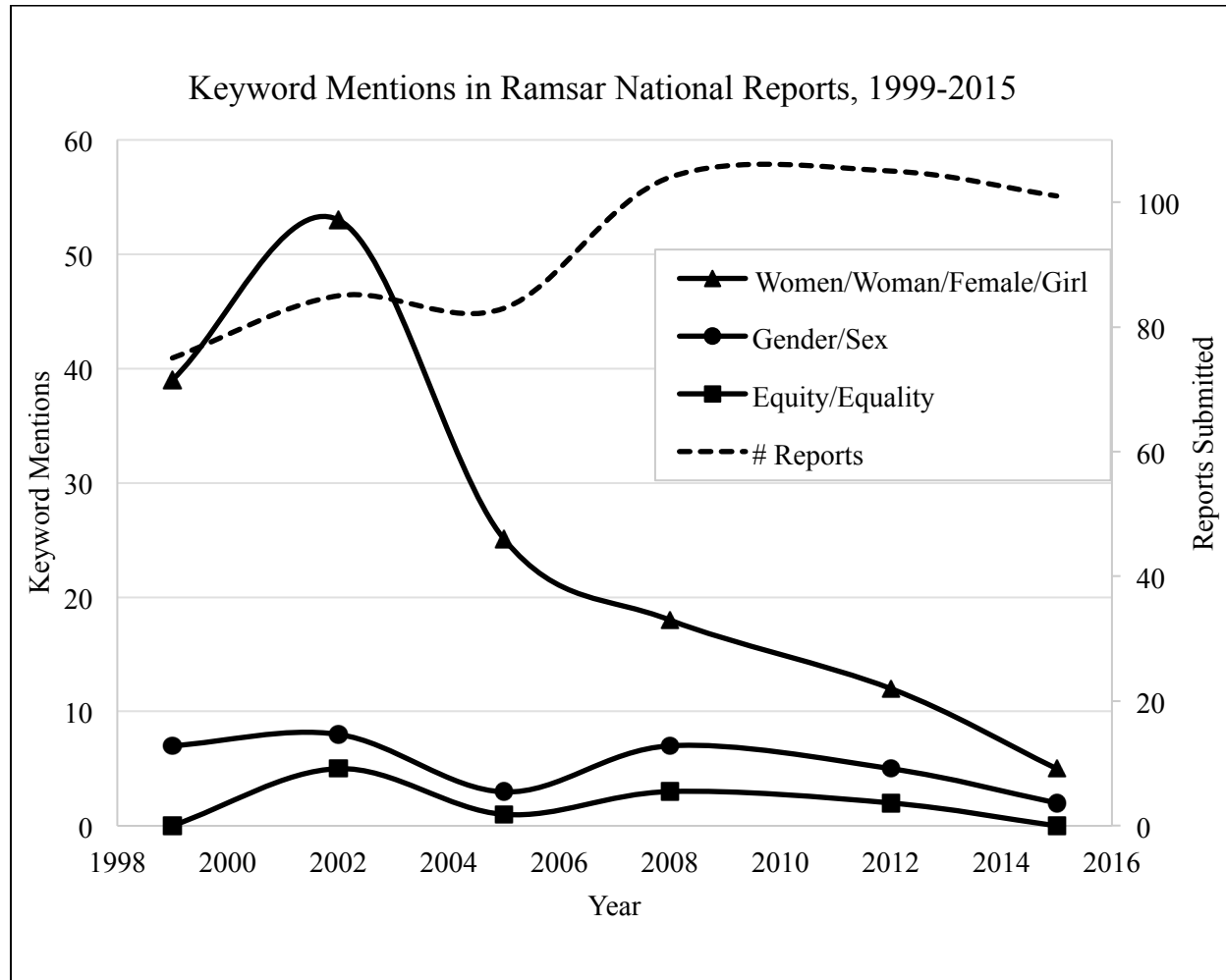


Table 2. Regional incidence of gender-related keywords in Ramsar National Reports, submitted at three- or four-year intervals between 1999 and 2015.

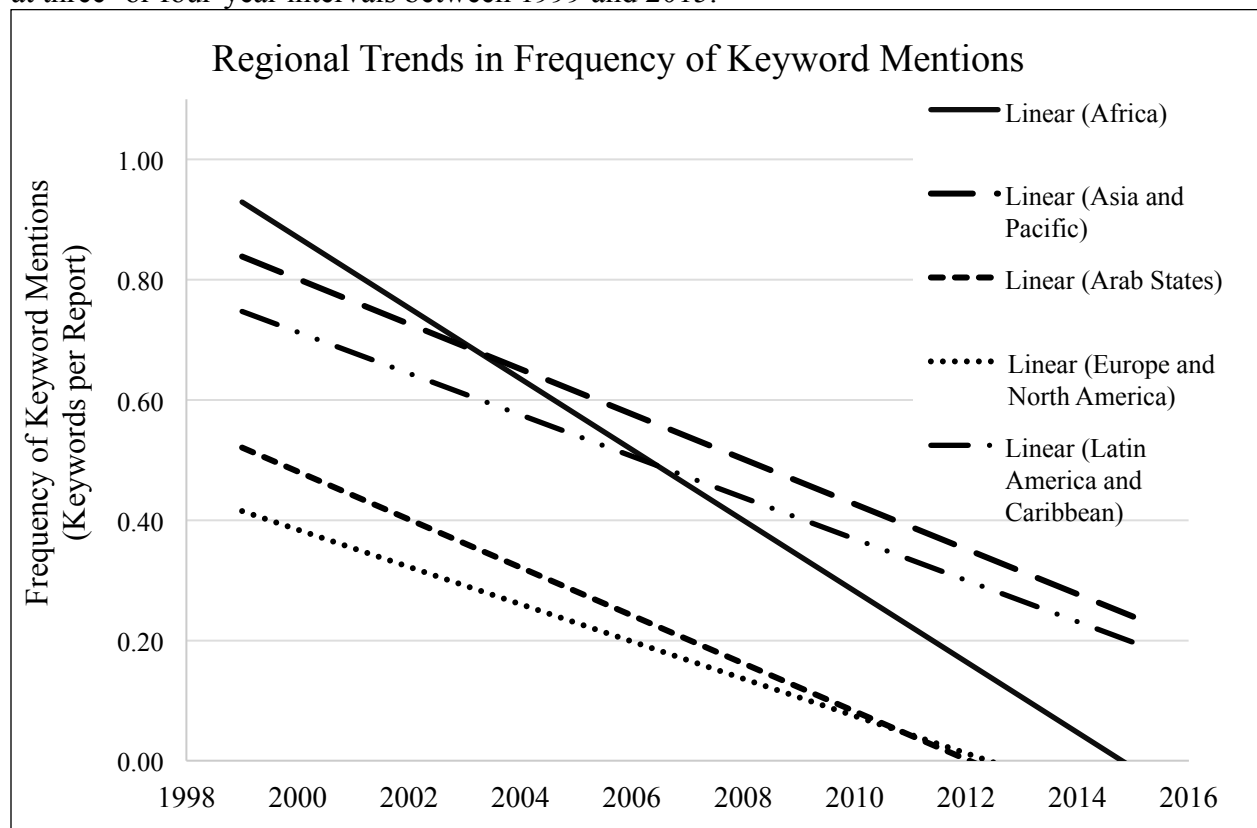
Year	Keyword Category	Africa	Asia and Pacific	Arab States	Europe and North America	Latin America and Caribbean	Totals
1999	Gender/Sex	1	0	0	1	5	7
	Women/Woman/Female/Girl	13	7	2	9	8	39
	Equity/Equality	0	0	0	0	0	0
	Total Keywords	14	7	2	10	13	46
	Total Reports	12	13	3	31	16	75
2002	Gender/Sex	2	1	0	3	2	8
	Women/Woman/Female/Girl	13	13	1	15	11	53
	Equity/Equality	0	0	0	3	2	5
	Total Keywords	15	14	1	21	15	66
	Total Reports	21	14	3	28	19	85
2005	Gender/Sex	0	3	0	0	0	3
	Women/Woman/Female/Girl	14	5	1	1	4	25
	Equity/Equality	0	1	0	0	0	1
	Total Keywords	14	9	1	1	4	29
	Total Reports	22	11	4	27	19	83
2008	Gender/Sex	0	4	0	0	3	7
	Women/Woman/Female/Girl	7	5	0	1	5	18
	Equity/Equality	0	1	0	0	2	3
	Total Keywords	7	10	0	1	10	28
	Total Reports	30	15	5	31	23	104
2012	Gender/Sex	0	1	0	0	4	5
	Women/Woman/Female/Girl	4	4	0	0	4	12
	Equity/Equality	0	1	0	0	1	2
	Total Keywords	4	6	0	0	9	19
	Total Reports	33	16	6	29	21	105
2015	Gender/Sex	1	0	0	0	1	2
	Women/Woman/Female/Girl	2	0	0	0	3	5
	Equity/Equality	0	0	0	0	0	0
	Total Keywords	3	0	0	0	4	7
	Total Reports	31	14	7	28	21	101
Region Totals, All Years	Gender/Sex	4	9	0	4	15	32
	Women/Woman/Female/Girl	53	34	4	26	35	152
	Equity/Equality	0	3	0	3	5	11
	Total Keywords	57	46	4	33	55	195
	Total Reports	149	83	28	174	119	553
	Average Keywords per Report	.38	.55	.14	.19	.46	.35

Reports by CPs in Asia and the Pacific and Latin America and the Caribbean included the greatest number of keywords per report submitted. Other regional data are summarized below.

- CPs in Africa contributed 149 reports (27% of total reports) and 29% of total keyword mentions;
- CPs in Asia and the Pacific contributed 83 reports (15% of total reports) but 24% of total keyword mentions;
- CPs in Arab States contributed 28 reports (5% of total reports) and 2% of total keyword mentions;
- CPs in Europe and North America contributed 174 reports (31% of total reports) but only 17% of total keyword mentions; and
- CPs in Latin America and the Caribbean contributed 119 reports (22% of total reports) and 28% of total keyword mentions.

Reports of regions having higher proportions of developing countries, then, mentioned keywords more frequently than reports of regions having more developed countries. Reports by CPs in Europe and North America, for example, contributed only 33 of the 195 keywords (17%) while having contributed 174 of the 553 (33%) reports in the dataset. Notably, reports by CPs in Asia and the Pacific Islands contributed nine of the total 15 mentions of “gender” and “sex.” Figure 2 shows regional trends in the number of keyword mentions per Ramsar National Report submitted between 1999 and 2015.

Figure 2. Regional trends in frequency of gender-related keywords in Ramsar National Reports at three- or four-year intervals between 1999 and 2015.



Analysis of Discourse and Characterization of Women

This section will discuss discourse on women’s participation and gender dynamics in the National Reports studied. The IUCN GGO gender analysis framework’s four themes on characterization of women (Part A of the framework; see Table 1) were present in all reports containing gender keywords, and a new theme not initially included in the framework also emerged: women characterized as indistinct from other marginalized groups. Table 3 summarizes the frequency with which each theme was present in the Ramsar National Reports containing gender keywords. This section provides examples and discussion of each theme. Excerpts were edited for correctness.

Table 3. IUCN GGO gender analysis framework Part A.

A. How are women viewed?		# of Reports (% of the 87 Reports Mentioning Keywords)
	Vulnerable	1 (1%)
Agents of Change	12 (14%)	
Indistinct from Other Marginalized Groups	32 (38%)	
Beneficiaries of Policies or Programs	33 (38%)	
Stakeholders	37 (43%)	

Women as Vulnerable (1%)

This theme was present in only one report, which mentioned women in the context of vulnerability.

India 2008:

Does the Contracting Party promote public participation in decision-making (with respect to wetlands), especially with local stakeholder involvement in the selection of new Ramsar sites and in Ramsar site management?

Resource information on local communities has been elaborately compiled in [the] case of Loktak and Chilika wetlands. The Atlas of Loktak provides a detailed assessment of community profile, community institutions, impacts of wetland degradation on communities, vulnerability context and participatory planning through involvement of local communities particularly economically disadvantaged groups and women.

This quote illustrates the National Reports’ only reference to assessment of women’s vulnerability. India’s administrative authority responsible for implementing the convention, the Ministry of Environment and Forests, reports on participatory planning that promotes public participation in decision making and notes consideration of the vulnerability context

of women, among other local community subgroups. The report describes only the existence of the activity rather than its outcomes or impacts, avoiding commentary on the longer-term effects of promoting women's participation. This lack of depth is typical of the keyword mentions in this dataset.

Women as Agents of Change (14%)

Twelve National Reports discussed women as agents of change, which I defined for this study as women expressing agency through a) access to and control over resources or b) having a voice in society and influencing policy (Markham, 2012). Of the 12 National Reports discussing women in this context, four were submitted by CPs in Asia and the Pacific (India 1999, India 2002, New Zealand 2002, and Australia 2012), three were submitted by CPs in Latin America and the Caribbean (Guatemala 1999, Costa Rica 2002, and Ecuador 2008), three were submitted by CPs in Africa (Egypt 2005, Egypt 2008, and Gambia 2012), and two were submitted by CPs in Europe and North America (Italy 2008 and Mexico 2015); no reports by CPs in Arab States characterized women as agents of change. These regional trends mirror those of the full dataset (see Figure 2).

This theme appeared in a wide variety of contexts, from women organizing educational events (India 1999, India 2002, Australia 2012) to acknowledgement of women's traditional knowledge (Egypt 2008). Several keyword mentions fitting into this theme described women initiating business enterprises and other income-generating activities. Keyword mentions characterizing women as agents of change illustrate women's empowerment through administrations' attribution of agency to women as a distinct subgroup.

New Zealand 2002:

Of [the wetland site management committees in place], how many have women's groups represented?

Not known, but there are two main national women's groups involved at both national and local levels in wetland policy, legislation and management, namely the National Council of Women and Women's Division of Federated Farmers (Rural Women).

New Zealand's 2002 report provides clear description of women's groups having a voice in policy at national and local scales. Though this quote has more detail than most others discussing women in policymaking, neither outcomes nor impact of these groups' presence is discussed.

Egypt 2005, describing development of alternative livelihoods:

More emphasis needs to be directed towards encouraging the female sector of society, including Bedouin women, to initiate their own income-generating projects in such fields as poultry keeping and making the characteristically embroidered dresses and other items of clothing. Traditional 'cottage industries' such as using date palm leaves in the

manufacture of baskets and various items of furniture (chairs and tables) should be encouraged.

Gambia 2012:

What have been the most successful aspects of implementation of the Convention?

Formation of [the] Gambia Protected Area Partnership and Network to governance PAs including Ramsar Sites. In Baobolong Wetland Reserve, the community women are implementing village banking (saving for change plus bioright) and horticultural gardening.

Egypt's 2005 report and Gambia's 2012 report illustrate two instances in which CPs' implementing agencies acknowledge the need for women-initiated development projects. These quotes provide further evidence that some CPs recognize the importance of women's agency with regard to their earning capacity.

Finally, Australia 2012:

Have World Wetlands Day activities, either government and NGO-led or both, been carried out in the country [...]?

Each year WWD activities are undertaken throughout Victoria. For example in 2010, the Mallee Catchment Management Authority (CMA) invited local residents to take part in a field trip to the popular Margooya Lagoon in the Beggs Bend State Forest. Social research undertaken by Wimmera CMA in Victoria has revealed that women are often the driving force behind environmental conservation activities on farms. In response, Wimmera CMA has sought to harness this interest, build knowledge and capacity and empower farm wives to undertake wetland conservation by organising an annual WWD "Chicks in the Sticks" event. The events, held each summer from 2008, bring local women together at a wetland to enjoy refreshments and learn more about wetland conservation.

Australia's 2012 report gives perhaps the clearest description of outcomes resulting from women controlling use of natural resources and influencing policy through implementation of annual education activities. This quote demonstrates an instance in which a management agency observed women's leadership, sought to learn from women's knowledge, and facilitated continued education. Even at this level of detail, though, long-term impacts are not discussed.

Women as Beneficiaries of Policies or Programs (37%)

A fourth theme strongly present in the National Reports' keyword mentions is that of women as beneficiaries of policies and programs. This theme was present in 37% of documents mentioning keywords, which often discussed women as recipients of economic aid, alternative livelihood training, or targets of sustainable wetlands awareness education. These

activities are meant to link wetlands conservation with sustainable development and poverty alleviation; however, this discourse attributes less agency to women than other keyword mentions characterizing women as agents of change. Illustrative excerpts are provided here.

Poland 1999:

Describe what actions have been taken to encourage active and informed participation of local communities, including indigenous people, and in particular women, in the conservation and wise use of wetlands.

In the year 1996 the Government of Poland adopted the National Action Programme for Women until 2000, which contains objectives and recommendations relating to sustainable development, adopted by the IVth UN World Conference on Women. In accordance with Agenda 21, special programmes for women are now being established to promote sustainable consumption models and behaviour, energy, water and raw material conservation, waste segregation and a healthy life style.

South Africa 2002:

Workers in rehabilitation projects implemented through the Working for Wetlands partnership are selected from communities adjacent to the wetlands to be rehabilitated. The policy of Working for Water (the parent organisation of Working for Wetlands) dictates that at least 60% of the contractors and workforce should be women. Through training and awareness programmes, the workers are trained to promote the wise use of the rehabilitated wetlands in their communities, thereby contributing to the sustainability of the rehabilitation actions.

Egypt 2005:

[What activities have been planned or implemented to] Encourage active and informed participation of local communities and indigenous people, in particular women and youth, in the conservation and wise use of wetlands[?]

Planned activities: Providing women with training courses and raw materials to produce traditional hand craft products.

Local communities have their own traditional lifestyle which is adapted to the desert environment, this knowledge helped in preserving the natural resources of the area, they have many benefitable knowledge such as: 1) Handicraft. Supplying women in each village with a few simple looms for weaving rugs and machines for knitting clothes, such activity will have the added advantage of preserving some of the local cultural heritage and tradition.

Gambia 2012:

What have been the most successful aspects of implementation of the Convention?

Formation of [the] Gambia Protected Area Partnership and Network to governance PAs including Ramsar Sites. [...] In [the] Tanbi Wetlands Complex, women engaged in oyster harvesting are trained to improve methods of harvesting and increase market value of the products.

Women as Indistinct from Other Marginalized Groups (38%)

This theme emerged from the data despite not being included in the context analysis framework. Many of the keyword mentions relating to women appeared nested within discussions of broader “local communities” or “disadvantaged groups,” masking detail on participation of women as a distinct subgroup. Further, reports that did identify women as a distinct subgroup often did so without next describing corresponding distinction in women-focused wetland policy or activity implementation; this tendency potentially amounted to gender tokenism in reporting on these activities and policies (Murthy, 2010). One possible explanation for this pattern could be the same theme’s presence in the questions of the National Reports themselves. For example, one question listed on each National Report for 1999 states:

Describe what actions have been taken to encourage active and informed participation of local communities, including indigenous people, and in particular women, in the conservation and wise use of wetlands.

Administrative agencies completing National Reports for CPs might have a tendency to mirror the language of the reports’ questions. The structure of this question, in particular, might have heavily influenced the presence of this theme. The below excerpts illustrate this characterization of women, which was present in 38% of reports that mentioned keywords.

Kenya 1999:

Active and informed participation of local communities, including indigenous people, and in particular women is very crucial for effective wise use and conservation of wetlands. In Kenya these groups of people are encouraged to participate through a variety of strategies.

Bangladesh 1999:

Under the “Sustainable Environment Management Programme” there are about 6 component projects aimed at involving local communities specially women for management of flood plain and wetlands management.

Ireland 1999

One particularly interesting project from a wetlands conservation is the Tanga Coastal Zone Conservation and Development Programme. [...] The project will actively encourage the participation of local people, including women, in the identification and resolution of priority environmental problems related to sustainable use of coastal resources.

These excerpts of National Reports by CPs in many regions of the world demonstrate a possibly universal coupling of women with other subgroups typically excluded or marginalized from participation in policy planning and management. Each example provides little to no detail on the mechanism of participation, and, as with other themes reported in this study, no detail on cumulative effects or impacts.

Women as Stakeholders (43%)

Finally, 43% of reports mentioning keywords characterized women as stakeholders and discussed their involvement in the context of participation on wetland management committees. This theme largely arose due to questions on stakeholder representation in the 2002 National Reports. The 2002 reports asked each CP whether wetland management committees involve local stakeholders and asked them to respond with a) how many management committees have representatives of women's groups and b) details on this topic. This type of question is helpful for broadly understanding extent of participation of women in decision making, providing insight into how many management committees include women representatives. However, the reports gave no insight into committee-level dynamics, such as how vocal women are on these committees, and no record of outcomes or impacts related to women's involvement. As with the other themes, effects of such participation are difficult to determine. Finally, some of the keyword mentions present in this theme described activities or policies that were planned rather than already implemented. This section provides two quotes from reports discussing women as stakeholders.

Kenya 2005:

The planning process involved stakeholders mobilisation, education, awareness and capacity building for an effective participatory process. During this process one of the key lessons learned include [...]

- Each stakeholder must be given a chance to contribute to the planning process despite their social status. This creates ownership, which is fundamental to the success of implementation.*
- Women and youth should be accorded appropriate forums to make their contributions.*

Vietnam 2008:

There are a number of measures taken in Xuan Thuy National Park (the first Ramsar Site of Vietnam) including the mangrove rehabilitation and protection programmes; [...] the communication programmes were conducted in both core and buffer zones of the park that involve by a wide-range of stakeholders, especially the social organisations such as Farmer Union, Woman Union, Youth Union, Veteran Union etc. Step by step take part in the conservation initiatives led by international and national organisations.

Conclusions

This exploratory analysis of National Reports to the Ramsar Convention highlights a continuing lack of reporting on gender dynamics and women's participation in marine ecosystem management. Keywords were mentioned in under 16% of reports, and mentions of keywords relating to women decreased by approximately 90% between 1999 and 2015. Reports from Africa, Asia and the Pacific, and Latin America and the Caribbean discussed the gender keywords more frequently than reports from Europe, North America, and Arab States. The decrease in discussion of women and gender issues between 1999 and 2015 may reflect changes in the objectives of the Ramsar Convention's Strategic Plans.

The IUCN GGO gender analysis framework also revealed dominant themes and characterizations within the reports' descriptions of women's participation in marine ecosystem management. Nearly half of reports that did mention women discussed them in the context of acting as stakeholders on wetlands management committees. This shows that Ramsar National Reports can be used to determine the extent of women's participation in relevant environmental decision-making bodies. Within reports mentioning gender keywords, women were also characterized as beneficiaries of policies or as indistinct from other groups often excluded from decision-making, including indigenous people and youth. The latter context ultimately masked detail on policies' involvement of and effects on women as a distinct subgroup. Women were less frequently characterized as agents of change or as vulnerable.

Importantly, National Reports to the Ramsar Convention may not accurately reflect ground-level implementation of activities or policies related to women and gender. Keyword mentions were generally vague, obscuring details such as reported activities' specific outcomes and impacts on the status of women in wetlands management. The lack of detail made differentiating activities' and policies' impacts on women from those on larger subgroups (the "local community" or indigenous people) difficult and limited the possible depth of analysis. Further, women's mere presence in decision-making arenas cannot be assumed to ensure equity in decision making itself; however, understanding the extent and context of reporting on women's participation in marine wetlands management still provides insight into the equity of governance.

These findings have implications for improving future reporting and measurement of gender equity in marine and environmental management and policy. First, because few reports discussed women's activities and participation in depth, agencies responsible for national reporting may consider increasing the detail with which women's participation is discussed. Reports' mentions of women and gender provide little insight if no description of women's involvement in

management or policymaking is given along with these mentions. More detail would allow a better understanding of both how women are participating in marine ecosystem management and whether this participation has an effect on policy implementation. Secondly, the National Reports provided no insight into long-term or cumulative effects of increased participation of women in management and decision-making, where applicable. Building mechanisms for measurement of cumulative or long-term progress into the reporting process could allow agencies to concretely assess progress over time. Further, because the wording of the National Reports' questions may have influenced the tendency for reports to characterize women as indistinct from other subgroups, care should be taken to craft report questions that elicit as much differentiated knowledge as possible about various target groups and subgroups. Agencies may consider explicitly avoiding gender tokenism by detailing effects of policies on women, specifically, for instances in which women are mentioned as a targeted subgroup. Finally, future research could deepen this analysis by exploring drivers of the decrease in gender keyword mentions between 1999 and 2015. Understanding whether and why attention to women and gender began to disappear from the Ramsar Strategic Plans after 2002 may be a first step in improving our ability to measure gender equity in implementation of this convention and other environmental protection conventions.

Acknowledgements

I am grateful for the many advisors, mentors, colleagues, family members, and friends without whom completion of this thesis would not have been possible. Immeasurable thanks to Dr. Edward Allison for his inspiration, critical guidance, and support on this study and other endeavors; Dr. Sara Curran for her expertise and mentorship; Molly Gilligan, Barbara Clabots, and the IUCN GGO EGI staff for their collaboration and excellent feedback; Dr. Nives Dolsak and Dr. Marc Miller for their guidance; and colleagues in the Marina Lab at the UW School of Marine and Environmental Affairs.

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