



# LUND UNIVERSITY

## Gendering Environmental Reconstruction

A study of the gendered dimensions of UNEP's  
environmental reconstruction assessments

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# Abstract

As we are facing a future of more frequent and extreme weather events targeting primarily low income countries, research on effective and inclusive environmental reconstruction following these crises is vital. In this study, the gender inclusion of UNEP's environmental reconstruction assessments is examined by looking at four cases in which the organisation has performed assessments on widely different premises. With contrasting combinations of *low* contra *high governmental equality*, and *natural disaster* contra *armed conflict*, these cases created a spectrum used to map and generalise the overall gender inclusion of the organisation's post-crisis assessments. Using findings from the emerging academic field of gender and environmental security to aid the analysis, this study adds to the research by creating a text analysis framework for gender evaluations of reconstruction assessments. It finds that UNEP is not consistent in their gender inclusion, neither in matter of prioritised areas, recommendations or inclusion of women. It also shows that the equality of the government requesting the assessment and the type of crisis causing the environmental degradation does not seem to affect the gender approach of UNEP's environmental reconstruction assessments.

*Key words:* environmental reconstruction, gender, security, UNEP, vulnerability  
Characters: 70 201

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# 1 Introduction

With the advent of Global Climate Change (GCC) and the concurring acts of ecological-societal destruction, the vast conceptual veil perpetuating society's ultimate illusion that the fate of the human species is somehow separate from the fate of the Earth is finally tearing.

(Godfrey & Torres 2016: 1)

As we are facing a future of accelerating climate change consequences including extreme weather conditions, preparing both for the prevention of as well as reconstruction after these events is of highest importance. However, the largest impacts of the changing weather tend to asymmetrically target the smallest contributors to the problem. Low income countries globally are suffering the environmental consequences from the rapid and continued industrialisation of the 20th century and the unsustainable life standards of the Western world, whilst having little influence on the international political agenda themselves (Black 2016: 172). Simultaneously, the privileged countries label those escaping from unlivable conditions as security threats (Dalby 2009: 2).

This has created a need for a fundamental reconceptualisation of security, as neither security nor the environment as we know it can be taken for granted under global climate change (ibid.: 4).

Even though the different experiences from violent conflict and the importance of women's inclusion in peacebuilding was acknowledged by the United Nations in resolution 1325 in the year 2000, followed by a number of complementary resolutions, security in the environmental sphere was for a long time perceived as gender neutral (Detraz 2013: 165). Now, more and more research is aimed at unmasking the gendered dimensions of experiences from crisis caused environmental degradation and decision-making in the area to extend the understanding of injustices beyond the North and South conceptions of victims of contra contributors to global environmental change.

In environmental movements worldwide, around 90% of the active members are women, which contrasts their significant underrepresentation in policy making and organisations with high environmental impact such as the energy industry and the military (Stein 2004: 2; Black 2016: 174). The social and economic vulnerabilities of women in the most affected areas does however make them particular targets for the climate change effects, as they are traditionally household bound and often lack the possibility to escape extreme weather conditions or toxic environments. As disaster environments tend to bring out stereotypical behavior, women often experience sexual abuse in refugee camps and lack the legal protection the destroyed institutions used to provide (Black 2016: 174). These experiences and conditions tend to be neglected or put forward in a way which shadows these women's legacy as actors and contributors of knowledge of the local environment.

The United Nations Environmental Programme (UNEP) is the leading environmental authority in the world and largely determines the global approach to environmental issues (UNEP 2017a). In this paper, I will add to the emerging

theoretical framework on gender and environmental security by mapping the gender inclusion in four of UNEP's environmental reconstruction assessments carried out in the Maldives, Lebanon, Rwanda and the Philippines. These four cases cover all combinations of the characteristics low contra high governmental equality of the country requesting the assessment and natural disaster contra armed conflict, which creates a broad spectrum to map the general gender approach of UNEP.

## 1.1 Purpose and Research Question

The purpose of this research is to contribute to the outspokenly underresearched but emerging academic field of gender and environmental security studies by researching environmental reconstruction from a gender perspective (Floyd 2013b: 292). Post-disaster societies face tremendous challenges but are oftentimes viewed by scholars as a window of opportunity for societal and institutional change. The societal contribution of this research is thus to build the groundwork for research on how this opportunity is best seized from a gender perspective by looking at how it has previously been done in the assessments of the world's leading environmental actor.

UNEP did 2016 come out with an extensive agenda on gender and the environment in an attempt to gender mainstream their work (UNEP 2016). By thoroughly mapping their reconstruction assessments prior to the incorporation of this document, this study creates the basis for future comparisons between assessments performed before and after the publication of gender guidelines. Furthermore, it demonstrates just how far gender mainstreaming has come in the environmental security field.

Finally the specific characteristics of the chosen cases aims to illustrate potential differences in how environmental issues are viewed in relation to violent conflict and how the UN resolution 1325 regarding inclusion of women in the post conflict reconstruction process has intersected with environmental reconstruction. As UN missions are requested by the government, looking at the equality of the government also examines if the gender equality of the government has effect on the gender awareness of the assessment.

The research question reads as follows:

*How is gender included in UNEP's environmental reconstruction assessments?*

## 2 Theoretical Framework

The research question will be approached from a security perspective, namely by looking at the relationship between gender and environmental security. In order to reach a conclusion regarding gender inclusion in UNEP's assessments, the very concept of gender in this context will be defined and operationalised.

### 2.1 Previous Research

The field of gender and environmental security is relatively young and unexplored compared to other subcategories of security theory (Floyd 2013a: 9). Writings which have contributed to the birth of gender and environmental theory range from human security to ecofeminist pieces and theorisation on gender in connection to development and environment (see e.g. van den Homberg 1993; Floyd 2013a; Dankelman 2002). It seems to be overwhelmingly feminist scholars that incorporate the environment in gendered analyses of security, whilst gender does not yet have a given role in the environmental security debate (Detraz 2012: 165-6).

Previous published research on gender and environmental security are often in depth case studies aimed at showing why gender matters in the environmental security debate and particularly in climate change contexts. Some research discuss gendering environmental assessment (see e.g. Deare 2004; and Fulu 2007), but I have not found a comparative approach to evaluation like the one attempted in this paper.

### 2.2 Gender and Environmental Security

Since 1991, the concept of security has been broadened to include points of analysis beyond the nation state. This research paper focuses on human security in relation to gender and the environment. The fundamental understanding of security used here is based on Ken Booth and Jon Barnett which identifies security as equal to emancipation and function of power respectively (Booth 1991: 319; Barnett 2001: 122). This way of conceptualising security highlights the power relation of who is allowed to define security and who is understood as

insecure. This constitutes the core of why inclusive approaches are important in environmental reconstruction or any post-crisis situation where society is to be rebuilt.

Environmental security refers to the broad range of analytical approaches connecting threat to the environment, either through the potential threat environmental events pose to humans, societies or peace, or the threat that human activity poses to the environment (Floyd 2013a: 2). Ever since the link between environmental stress and national security was introduced through the Worldwatch Institute and Brundtland Commission in the late 1970's and 90's respectively, it was incorporated in national policy agenda and continued to mature when classical security approaches was mistrusted due to their inability to foresee the Cold War's end (ibid.: 6).

The theoretical contributions from environmental security used in this study are first the hypothesis that human activity in the anthropocene is directly tied to environmental degradation and second the understanding of social and ecological systems as complex and interdependent of factors both within and between the fields (Barnett 2001: 2-3). In other words, human activity is understood as responsible for global climate change, but the largest contributors to the change are generally not the ones most vulnerable to its effects. This goes both for state level and intersectionally among humans in already vulnerable societies (Black 2016: 179).

The lack of gender analysis in environmental security studies has discursively shaped the way the field is understood and treated, which systematically undermines the different experiences of environmental insecurity (Detraz 2013: 154). Contrarily, some ecofeminist theorisations put emphasis on women's inherently closer relationship to nature has instead had an essentialist effect on the intersectional debate between gender and the environment (Detraz 2012: 173). This can be viewed in official reports highlighting only women in vulnerable positions without acknowledging the gendered threat exposure of men and marginalised groups, or their respective agency (Detraz 2013: 154). The emerging field of gender and environmental security thus seeks to mainstream the aspect of gender rather than the specific vulnerabilities of women to become a given analytical dimension in environmental security studies (ibid.: 155).

In short, gender and environmental security studies sets out to clarify links within the field of security by unmasking male bias in what is believed to be neutral areas (Verchick 2004: 65; Detraz 2009: 354). It encourages a dissection of the way 'security' and 'environment' is commonly understood, thus allowing analysis of climate change experiences from the point of view of those most marginalised (Detraz 2013: 164; Black 2016: 180). As environmental security theory differs in approach depending on the assumed relationship between humans, the environment and security, there are different approaches to how its gendered dimensions are best examined. Three of the most common trends in environmental security studies and their gendered implications will be presented briefly below.

Environmental conflicts occurring from resource scarcity or, in some cases, abundance have the security of the state as the central research object and draws

on classical theories of war, understanding security as primarily the lack of physical violence (Detraz 2009: 347). It enhances the risk the environment poses to peace rather than the effects conflict and human activity have on security of the environment itself. A gender and environmental security analysis would therefore in large extent draw on classical feminist security arguments by criticising its state centered approach and encourage looking at the human experiences of conflict and the role environment plays in them (ibid.: 348). It would highlight the problematic nature of labelling something as a matter of security whilst excluding essential causes for insecurity. The state-centered nature of environmental conflict studies also excludes explanations stemming from analysis of levels above and below state level. The very root causes for environmental conflict suggested by scholars might themselves be gendered, as with the case of for example youth bulges and unequal distribution of resources (ibid.: 348-9).

Ecological security, on the other hand, demands a radical shift and revision of security from a military perspective to a view of security focusing on the ecosystems of the world. Humans are in this view considered part of an ecosystem; not inherent to a dominant role over nature and not present in all ecosystems (Detraz 2009: 359). This goes well with the ecofeminist thought of the patriarchal abuse of the relationship between humans and nature through institutionalised environmental damage from war, abusing nature as a strategy in the same sense women are victims of strategic wartime abuse. The main concern issued by feminist environmental security scholars is the lack of intersectional awareness of the differing experiences and impacts of environmental degradation (ibid.).

Lastly, the approach that this study will build most upon is the environmental security approach. It includes environmental conflicts, but focuses on the human experiences and also considers human security from environmental degradation in negative peace scenarios. As people are the reference point, the feminist analysis lies very close to this approach of environmental security studies. However, despite the broader inclusion of affecting factors than that of environmental conflict scholars, this field tends to systematically neglect the gendered dichotomy of humans/environment. Humans have control over the environment to a certain extent and the environment can affect human lives through disastrous events such as drought and catastrophes. When environmental security scholars addresses these events, it is often with reference to sustainable development approaches which has been lacking in gender-sensitivity and needs to be analysed in order to unmask for whom the security is intended (Detraz 2009: 350-1).

Understanding security as emancipation, environmental policy making should thus aim to decrease or stop environmental degradation as both men and women are affected negatively by it, and simultaneously aspire to remove factors that are constraining people's free choice (Detraz 2013: 165). In order to research how gender is included in UNEP's environmental reconstruction assessments, gender as a concept needs to be defined in an environmental context.



## 2.2.1 Why Gender?

Gender in international relations is understood as something beyond a classification of humans to biological sexes. Rather, it looks at how the characteristics associated with masculinity and femininity are ascribed to different dichotomies, in which the masculine characteristics are systematically valued higher than feminine by both men and women in the Western world. In other words, it can be understood as a discursive power hierarchy constructing and enforcing our social and political world (Sjoberg 2010: 3). Understanding gender in different contexts thus encourages and aids a reevaluation of priorities, whilst ignoring gendered hierarchies risk conserving existing relations of power and subordination (Detraz 2013: 161; Tickner 1992: 9). This, alongside the research claiming post-disastrous events to be ‘windows of opportunity’ for institutional, political and societal change, is why this study uses gender as a measuring tool (see e.g. Birkmann et al. 2010; Christoplos et al. 2001; Enarson & Meyreles 2004).

Dichotomies often encountered in international relations and ascribed these gendered values are for instance reason/emotion, strong/weak, public/private, forward/passive and self/other, where the first in each pair are attributes commonly paired with masculinity, and the second femininity (Tickner 1992: 8). This does not mean that all, or even most, men withhold these masculine features, rather that they are socially constructed characteristics of what a man ought to be, celebrated internationally in the name of defending their nation and thus legitimising a patriarchal political order (ibid.: 6).

Following this, it is argued that these values of masculine and feminine traits structure society as a whole, not the least in workplaces and household tasks (Anker 1998). Typical masculinely coded occupations dominated by men worldwide are government officials, construction workers, mechanics and soldiers based on self-reinforcing stereotypical traits. Women, on the other hand, tend to be overrepresented in professions characterised by care such as nurses, child care and teachers as well as professions building on household developed skills such as maids, cooks and tailors (ibid.: 24, 26). In low income countries, women often constitute a large part of the agricultural sector and bear the main responsibility for household chores, such as gathering firewood and water, all of which are severely affected by climate change (Denton 2002: 10, 12).

Disaster situations bring out the extremes of gendered behavior, practices and institutions. The different experiences of environmental hazards are therefore widely different depending on the contextual gender roles and socio-economic status of the group or individual in question (Fulu 2007: 843). Women are globally overrepresented among people living below poverty lines, and research shows that they are also more likely to suffer from extreme poverty. Research shows that the unpaid labour of women all over the world often is twice that of men, placing a larger burden of the poverty on women - especially in female headed households. This is commonly known as the feminisation of poverty and demonstrates why poverty is included in this gender analysis of UNEP’s assessments (Chant 2007: 1; Shvedova 2005: 42). The socio-economically closer

ties to household and caregiving roles also hinders women from escaping disasters fast enough, whereas women in refugee camps are often repeatedly targeted for gender based violence. Men, are in contrast stereotypically more risk-taking and therefore vulnerable to direct, physical dangers of disaster events (Verchick 2004: 74).

Constructive reconstruction operations would take into consideration these gendered vulnerabilities and combat the factors which systematically oppresses targeted societal groups by seizing the window of opportunity post-crisis reconstruction events present. Having historically marginalised groups provide insight and even leadership in the reconstruction of their societies could be the first step towards creating positive change from a disastrous event (Fulu 2007: 844). In contrast to the current situation where policy makers tend to be the ones insulated from climate change and thus disconnected from inclusive solutions, this would also fit policies to the need of those most affected and thus, theoretically, benefit everyone (Detraz 2009: 351; Black 2016: 181).

This research adds to this branch of the theory by looking at how one of the world's most prominent environmental reconstruction agencies include gender in their reconstruction assessments.

## 3 Method

This research is in the form of a qualitative text analysis where the theory is applied to the chosen cases by asking the same questions to their respective reports. For the sake of intersubjectivity, my interpretation of what could be considered gender in the context is built upon the theory introduced in the previous chapter and is presented in a brief description under each question (Boréus & Bergström 2012: 88-9).

### 3.1 Cases

**Table 3.1**

	<b>Natural Disaster</b>	<b>Armed Conflict</b>
<b>More Equal</b> (% of women in government)	Philippines (27.3%)	Rwanda (56.3%)
<b>Less Equal</b> (% of women in government)	Maldives (4.8%)	Lebanon (3.1%)

In order to analyse and to some degree generalise how gender is included in UNEP's environmental reconstruction assessments in a representative yet elaborate way, four cases have been chosen based on specific characteristics which represents and allows comparison between the far ends of the spectra illustrated in Table 3.1. The four cases, the Philippines, Rwanda, the Maldives and Lebanon were chosen from UNEP's existing bank of published material.

As presented in the gender theory description, the UN Security Council resolution 1325 introduced in 2000 oblige member states to include women and gender aspects in the peace process, in which post-conflict reconstruction is included (UNSC 2000). All chosen assessments have therefore been conducted after the year 2000 in order to see if this has translated to the field of post-conflict and -disaster environmental reconstruction. This is also the background to the first choice of categorising the cases, namely by the factor causing the environmental degradation needing assessment. The division between Natural Disaster and Armed Conflict aims to examine if gender is handled differently in reconstruction of disasters caused by the generally believed "neutral" area of nature itself or the much theorised area of armed conflict or war, which is the primary target of resolution 1325.

The second category, equality, is based on both democratic values of participation as well as the feminist theoretical understanding of the importance of including women into a largely male dominated sphere (Ballington 2005). The latter would secure that the decision-making process includes more perspectives than those of the most privileged and thus produces more inclusive policies (ibid.). Using it as a differing factor between the cases in this study allows a comparison of whether gender inclusive politics number wise has resulted in a more gender inclusive outcome in terms of reconstruction politics. Since governments request UNEP environmental reconstruction assessments, it could also paint a picture of whether recommendations and UNEP team constellations differs depending on the equality of the requesting government (UNEP 2005; UNEP 2007; UNEP 2011; UNEP/OCHA 2013).

Naturally, the cases differ in more than in these factors. For example, they are located in different geographical areas and have different political and historical contexts. However, as this study looks at the recommendations of UNEP, these differences are viewed as a strength than a weakness of the research considering that the ideal approach from an international organisation like UNEP would be objective and independent from the political views in that country. Furthermore, should the research question be answered by looking at only one or two similar cases, it would not give a fair overview of gender inclusion in their work.

One disadvantage of using these cases is that they differ in time. The largest gap between the cases is 8 years (2005-2013). Although this could act as a third comparing factor between the cases displaying a potential development, it also decreases the explaining factor of equality and type of disaster comparisons. As this research does not aim to explain the gender inclusion in UNEP's environmental reconstruction assessments, rather paint an honest and generalising picture, the time difference is not viewed as an issue large enough to affect the research results.

## 3.2 Material

The primary material used in this research is UNEP reports of each empirical case. As mentioned in the previous section, these cases have many differences, but the fact that the UNEP has issued and published all of them makes them representative of the assessments the organisation performs. The reports differ in length; the assessment of the Philippines were 25 pages whereas the ones for the Maldives, Lebanon and Rwanda were 102, 184 and 384 pages respectively. This significant difference in report length could affect the extent of areas covered and evaluating comments. However, as it seems there is no set page frame for these reports, a probable lack of gender inclusion in the shorter ones says more about the priorities of UNEP than the scope of the mission.

The assessment for the Philippines were made in collaboration with another UN organ, UN Office of the Coordination for Humanitarian Affairs (OCHA),

which has a slightly different aim than the other cases, further clarified under **4.1 UNEP's Environmental Reconstruction Assessments**. However, as this joint assessment constellation is a part of UNEP's Disasters and Conflicts programme, it gives further width to the gender analysis of UNEP's assessments as a whole.

Primary material also includes UNEP's own vision and aim regarding their post-disaster assessments (UNEP 2016). Secondary material is theoretical writings for each of the theories used in the framework and complementary disaster aftermath descriptions of each case by scholars in the environmental security field.

### 3.3 Research Strategy

The following guide for analysis will be used consequently on all cases. As Kronsell & Kaijser acknowledges, there is not one set way to do an intersectional analysis on climate change, rather the method has to be tailored to fit the cases of analysis which I have attempted to do in this section (2014: 429-30). However, some questions are vital to ask in areas that are generally perceived to be gender neutral, including looking at “[w]hat type of environmental knowledge is recognised and privileged (...)” (ibid.: 30). Mindful of their recommendations; including both dimensions of femininity and masculinity as well as portrayals of men and women; the following questions are understood to cover the definition of gender used in this paper.

#### **1. Which areas are prioritised in the assessment?**

This question refers both to areas in their categorical and geographical sense. By looking at what categorical areas are included in the assessment, it gives a picture of what sectors of society are believed to be most important. These sectors are then analysed from a gender perspective, looking at whether they are generally coded masculine or feminine, and if they are known to expose any particular vulnerabilities among men or women. For example, as research shows that women are disproportionately exposed to gender based violence in refugee camps, including those in the assessment along with a recommendation for quicker reconstruction of households would be linked to a gender mindful way of performing environmental reconstruction assessments (this is further clarified in question **2.** and **3.**).

By looking at geographical areas, this question ties in the feminisation of poverty theory by examining if the prioritised areas are rich or poor.

#### **2. What recommendations are made?**

The second question is based on the findings from question **1.** and examines the nature of the recommendations and to whom UNEP are turning with these recommendations. Do the recommendations show awareness of the gendered experiences from environmental degradation? This could take the form of

acknowledging how the recommendation would help combat a certain gendered structure or vulnerability, such as assessing the water availability and cleanliness in poor areas as it is often the role of women to gather water and be in close connection to it in terms of washing clothes and bathing children (Denton 2002: 10, 12).

As theory highlights the importance of an inclusive reconstruction process working cross-sectionally between public and private sectors, this question also looks at who UNEP are turning to with their recommendations and who they recognise as primary actors to amend the area in question (Deare 2004: 33). This enhances the understanding of security as empowerment.

### **3. How are women included in the assessment?**

Finally, this text analysis examines if and how the assessment includes women. First, it looks at how local women are portrayed in the report. Are women portrayed as purely victims or does the assessment take use of their local knowledge? Acknowledging gendered suffering is an important first step to a gender mindful approach to environmental reconstruction, but if it is not sided with an awareness of their potential as actors it might discursively place women in an essentialist stereotype (Detraz 2012: 173). Due to socio-economic relations, local women often inhabit a great knowledge of their surrounding environment, paired with a firsthand insight of their own needs and environmental vulnerabilities which ought to be recognised (Denton 2002: 11).

Second, it looks at the inclusion of women in the assessment team constellations, based on the theory of stakeholders in the environmental policy sphere (Detraz 2013: 165).

## 4 Results

The following results are structured in order of time of assessment to display a potential development in gender inclusion, starting with an overview of UNEP and their scope based on their own description. Analysis is made and presented throughout the text, based on the theoretical and methodological framework presented in previous chapters. Naturally, not all information found in the assessment reports is transferred to this study, rather only the most relevant findings from each report are presented, making the chosen content a result of the analytical process itself.

### 4.1 UNEP's Environmental Reconstruction Assessments

UNEP is, to use their own words,

(...) the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment.

(UNEP 2017a).

The authority has three main expressed responsibilities, which include assessing environmental changes on global, regional and national levels; advance measurement instruments; and strengthen institutions for sustainable environmental management. Their mission description states that it is within their scope to help both nations and people to better their life quality in a sustainable manner, which seems to embrace human security as empowerment (ibid.).

The *Disasters and Conflicts* programme within UNEP, which has produced the reports used in this research, seeks to deliver environmental solutions after both natural and conflict caused disasters as well as limit human vulnerabilities to environmental degradation. The core of their missions is to assess the "(...) environmental impacts of crises on human health, livelihoods and security (...)" (UNEP 2017b). There is no further definition of security, but based on the findings presented in the previous paragraph and the phrasing used here, human security appears to be in the centre of their approach. The main recipients of their recommendations are the national governments requesting their assessments (UNEP 2017b).

A branch within the Disasters and Conflicts programme is a joint unit between UNEP and OCHA which has performed the assessment regarding the Philippines. Their aim is to organise international response to environmental emergencies caused by either conflict or natural disasters. In other words, seeing as they too have to be requested by the national government and focus on the humanitarian effects of the disaster, the main difference between their assessment and those described in the previous paragraph is that their target audience are the international community (UNEP 2017b; UNEP & OCHA 2013).

## 4.2 The Maldives

The Maldives is an island group south of the Indian subcontinent. Despite a distinct drop in poverty numbers between 1997 and 2004, the income distribution was still fairly unequal in comparison to its surrounding countries at the time of the assessment, favoring the capital island of Malé over surrounding atolls (IFAD 2012a). The economy was tourism based, making up for 74% of GDP, followed by fishing (9.3%) and agriculture (3%). However, due to social and cultural restrictions only 4% of the employees in the tourism industry were women, whereas they made up for a majority of the agriculture work (Fulu 2007: 847). Out of their total average life span of 72 years, women were expected to work only 16 of them and spend the rest as a dependent, particularly responsible for and bound to household and caretaking (Shaljan 2004: 1838).

The Maldives were one of the countries severely hit by the 2004 Indian Ocean tsunami. Government estimations claim that almost 30'000 people were temporarily displaced by the natural catastrophe, 12 000 of which were still living in shelters or with friends and relatives at the time of the assessment (UNEP 2005: 6). As the sea level is expected to rise with at least 12 cm by 2030, flooding is likely to occur more frequently (ibid.: 22).

The government requested UN operation had the task to rapidly assess the environment in the tsunami aftermath; ensure that the environment was included in the national agendas for recovery; as well as mobilise recovery aid regarding environmental factors (ibid.: 4). The team constellation was reportedly multidisciplinary based on the prioritised expertise found necessary by the Maldivian government in consultation with UNEP (ibid.: 8). In the task force assigned to the Maldives, 3 out of 19 experts were women (ibid.: 99). The goal of the assessment from UNEP's view was to target specific environmental as well as cross-cutting issues which could aid the Maldivian government in their development of recovery and reconstruction plans (ibid.: 11). This specific mentioning of cross-cutting issues would imply an analysis of factors beyond the obvious, and include social factors as well.

### 4.2.1 Prioritised Areas



The highlighted priority areas in this assessment were the spread of waste materials, contamination of groundwater, disruption of water supplies, soil contamination and any damage the tsunami induced on livelihoods dependent on the environment such as tourism, fishing and agriculture (UNEP 2005: 9). Each of these fell under one of the four broader categories used; *Impacts on the natural environment*, *Impacts on the human environment*, *Economy & livelihoods* and *Environmental management capacity*.

Based on only the named priority topics, it seems that there was indeed a focus on areas in which women are particularly vulnerable, considering their close relation with water in household chores and special role in the nation's agriculture and waste management (ibid.: 32). There also seems to be an awareness of the intersectional effects of environmental degradation and society. As becomes evident in the report, large emphasis was placed on the tourism rehabilitation in which local women are practically excluded, whereas issues preventing displaced people from returning to their homes are addressed only in terms of homeowners receiving new homes and relocation plans for future catastrophes (ibid.). The prioritised areas came short of descriptions of why they are considered more important than other findings, and overall lacked an inclusive intersectional approach to vulnerabilities.

Very little priority was given the protected areas, which from an ecofeminist point of view would be considered nonchalant and detached, but since their degradation was reportedly believed to have been very limited, prioritising human security areas goes well with gender and environmental security theory.

Waste management was described as one of the Maldives top challenges, both before and after the tsunami. The landfill atoll of Thilafushi located close to the capital Malé and was presented as one of the most important ones in the region. The assessment report recognised the remarkable asymmetries in waste production between tourists and locals, but failed to incorporate the dimension of who deals with the resort waste and works at the dumpsites which in the case of Thilafushi most often are economically vulnerable immigrants (UNEP 2005: 33; Kumar Matturi & Beykan 2014: 19). Furthermore, waste in connection to the temporary shelters was noted as problematic, but not addressed with a solution other than the approval of a governmental initiative to send out waste management guides to tsunami vulnerable islands (UNEP 2005: 38).

One section was dedicated to an evaluation of the public awareness of environmental risks, which turned out to be low but steadily rising on local levels (UNEP 2005: 70). This inclusion of local knowledge is a good sign for the inclusiveness of the report, taking away some of the top-down nature of the reconstruction.

Geographically, the assessment covered a lot of areas both poor and rich, scarcely and densely populated. The densely populated and rich island with the capital Malé did however receive extra attention, even though it was described to have been spared from the worst effects from the tsunami due to coastal protection (ibid.: 22-3). From a gender perspective, this is a bad thing per se as the country has experienced urbanisation, where especially women from poor islands and atolls have moved to Malé for paid job opportunities (Shaljan 2004: 1838).

However, as gender was not a present dimension in this report, this opportunity to encourage empowerment of this group was not seized and instead the extra focus on the spared Malé may have taken resources from assessing other poorer and more damaged islands.

#### 4.2.2 Recommendations

The recommendations following the assessment considered the prioritised areas accordingly, focusing on rehabilitating the natural and human environment as well as recovering livelihoods and strengthening the environmental capacity (UNEP 2005: 2).

In the rehabilitation on environmental issues, the recommendations were not specific, rather they enhanced the importance of continuous assessments, planning and reviews of all areas recognised in the post-disaster assessment. UNEP encouraged the inclusion of local inhabitants in all aspects of these projects, which shows incentive to rebuild in an inclusive manner (ibid.: 76).

Protected areas were surprisingly included among the recommendations despite the incomplete assessment. The recommendation for creating monitoring and recovery plans came with an urge to give local stakeholders strong incentives to become engaged in preserving their surrounding environment by including them in the environmental management (ibid.: 78). From a gender point of view, this was another sign that the organisation tried to seize the window of opportunity to encourage participation

The human environment recommendations regarding waste management first and foremost encouraged the government to put together a clean-up programme with an educational dimension, aimed at teaching the population how to identify and handle hazardous waste (ibid.:78-81). Thilafushi was recommended to use for storing and monitoring hazardous waste (ibid.: 81). This recommendation did not take into consideration the already vulnerable health and economical condition of the migrant workers in charge of the waste management at Thilafushi, nor did it put forward ideas regarding the tremendous waste tourism generates.

Freshwater availability was addressed with several recommendations for storage and ways to fill up the wells, which would ease the heightened burden the extreme weather events put on the household chores. They further argued for an incentive to equip all households with adequate rainwater storage facilities, giving attention to the private i.e. the feminine coded half of the dichotomy public/private (ibid.: 82).

Following this, the livelihood recommendations started by highlighting the need for a campaign to clear rural areas of dead trees in order to minimise the income losses of poor households dependent on agriculture (ibid.: 84). The recognition of poor public knowledge of environmental emergency response was brought up again, with the recommendation to improve governmental communication and education initiatives (ibid.: 88-9).

There was no problematisation of the way shelters were handled, which other sources claim was a case of the *tyranny of the urgent*, meaning that basic needs

were addressed in a way inconsiderate of gender or social dimensions (Fulu 2007: 850). As families from different areas were put in the same emergency shelters holding sixteen people each, the lack of privacy reportedly exposed women and minors to gender based sexual violence (ibid.). The report did mention a government proposed long term relocation plan to reduce the threat exposure of environmental degradation and catastrophes to the population, including having inhabitants on island especially vulnerable move to larger and safer islands. At the time of the tsunami, only the capital island had coastal defense which drastically limited the tsunami impact. UNEP noted that sea walls of this kind would not be economically feasible to install around all islands and instead urged to find alternative solutions to coastal flooding for them (UNEP 2005: 22-3). They did not comment on the *de facto* coercive nature of the government's plan claiming to be completely voluntary whilst at the same time lacks any effort to secure the smaller islands, making the choice either take the offer to leave everything behind or live under the constant threat of natural disaster.

#### 4.2.3 Inclusion of Women

The only explicit mentioning of women were when women's committees were recognised as active agents in waste management and in descriptions of island governance where they were described as facilitated by Island Development Committees (UNEP 2005: 32, 68). In other words, women were neither portrayed as victims nor relevant leaders for development. There was no comment on gender and low awareness of varying vulnerabilities depending on societal status in the report, maintaining the view of the environment as a neutral area.

### 4.3 Lebanon

Lebanon is located on the east end of the Mediterranean Sea, neighbored by Syria and Israel. The country is politically divided between the major religions, Maronite Christianity and Shia and Sunni Islam. Although often noted that women in Lebanon enjoy freer conditions than their neighbouring counterparts, they still experience *de facto* discrimination in laws, social norms and culture, and their political representation remains limited (Khatib 2008: 438). By constitutional rights, all Lebanese are equal under the law but women still experience differing regulation regarding personal status laws based on their religious affiliation (ibid.: 439).s

Around 28.6 % of the population lived below the poverty level at the time of the assessment, most prominent in rural provinces of North and South Lebanon, out of which the Northern regions experienced the most widespread extent of extreme poverty (IFAD 2012b).

The 2006 armed conflict between Israel and Hezbollah is estimated to have killed around 1200 Lebanese and displaced over one million (Hamieh & Mac

Ginty 2010: 104-5). The target for bombing was mostly public utilities, infrastructure and homes, especially targeting Shia dominated areas in Southern Lebanon and Beirut's southern suburbs. It is reported most refugees started to return back to their homes within hours of the ceasefire, despite exposure to unexploded materials (ibid.).

The UNEP operation was formally requested during the ongoing conflict by the Lebanese Minister of Environment. The task was to perform an environmental assessment geographically limited to Lebanon including data collection of the overall status of the environment; identifying problematic areas which pose a threat to public health; and proposing sustainable recommendations for other areas to keep in mind during the reconstruction (UNEP 2007: 6). The latter does without doubt build up towards an intersectional approach to post-conflict reconstruction, which however was not the case in this assessment.

### 4.3.1 Prioritised Areas

The assessment report started with an extensive context guide of Lebanon which would be an ideal platform to present different vulnerabilities, but it had a strict focus to geographical descriptions of the nature with the exception of one short section about the country's largest economic sectors (UNEP 2007: 14-23). It looked at degraded sites in the Beirut area and South Lebanon, which does not say a lot about the demographic awareness of the assessment.

Neither of the prioritised areas takes into consideration the societal effects or the differing experiences from environmental degradation. The areas included industrial and urban contamination, solid and hazardous waste, water resources, coastal and marine environment, and weapons of environmental concern (ibid.: 42, 100, 112, 132, 146). The specialisations of the assigned experts matched these areas without cross-sectional exceptions like the ones seen in the Rwandan assessment.

The first of these areas, covering industrial contamination, included assessment of a power plant affected by the conflict but not directly hit; the Beirut airport; several petrol stations; and an industrial site containing warehouses, factories and agricultural facilities. All of these are male-dominated work spaces (Anker 1998: 26-7). On each site, the description covers possible contamination of close-by land, waste management practices and groundwater contamination.

The urban contamination also left a lot to wish from a gender perspective, covering the categorical topics as the industrial sites. The assessed areas included a residential area in southern Beirut known as the Haret Hreik Security Square which Hezbollah reportedly uses as a stronghold; a supermarket; the village of Zabqine; and a prison (UNEP 2007: 88, 93, 95, 97; Abedine & Brumfield 2014). Although aiding the supermarket would aid the travelling distance for house chores of local residents, there was continuously hardly any focus on societal effects of the degradation and reconstruction. The damaged civilian buildings did not receive any special attention, other than a brief mentioning in an image

description, further emphasising the public, masculine coded angle of the assessment.

Regarding hazardous waste the report highlighted the absence of a regulating legislation as landfills and dump sites often lack basic health and safety tools (UNEP 2007: 106-7). Besides that there were very few connections to human health.

The water resource assessment pointed out Lebanon's relatively high water access compared to its neighbours, and the luckily low conflict-impact on water contamination in areas around Beirut (ibid.: 112, 117). However, in South Lebanon the water quality and availability was severely affected and report highlighted the limited access to clean drinking water from wells (ibid.: 120-1).

A major oil spill was addressed in regards to coastal degradation, in which the only point relevant for this study was that the report did in fact praise the work of volunteers and local NGOs regarding shoreline clean up (ibid.: 137).

Finally, environmental degradation caused by weapons in warfare was recognised both in forms of its ecological effects but also that of human health, binding in the perspective of ecological security and environmental conflict. Ecological effects tie in vegetation fires which may affect the livelihoods of farmers, whereas the human health impacts recognised are mainly those of possible exposure to depleted uranium, increasing cancer risk. No traces of depleted uranium was however found (ibid.: 146, 150, 156).

#### 4.3.2 Recommendations

The recommendations for the industrial sites were very engineered focused, containing specific numbers and measurements for construction but lacking encouragement of local participation or rebuilding in another way than the original.

Institutional wise, UNEP recommended the Lebanese Ministry of Environment to take the lead in creating a plan for future environmental emergencies in order to effectively coordinate assistance. Following this they vaguely argued for the strengthening of that particular ministry, and also that information regarding environmental issues should be communicated to the public (UNEP 2007: 162).

The overall impression of the assessment was that it seemed to have gone in depth detail wise on engineering issues, whereas the other reports in this paper have included more areas leaving details up to the Government or intended recipient of the assessment to decide. The encouragement to take action on issues was aimed primarily at the Ministry of Environment and other environmental agencies, with the exception of one recommendation to train locals in proper asbestos management (ibid.: 163). The opportunity to encourage stakeholders' participation was given at several occasions in the recommendations, such as the need to work out a water resource management plan, but these opportunities were not seized.

### 4.3.3 Inclusion of Women

The different experiences from the environmental impact of the conflict were not noted anywhere in the report, neither through a mention of women, men or gender. There was only one woman in the entire assessment team, and all experts were men (UNEP 2007: 180).

## 4.4 Rwanda

Rwanda is a small, landlocked country located in central Africa. The ruling party Rwandan Patriotic Front (RPF) has since 1994 made a lot of advancements in women's political participation on all levels, including creating a Ministry of Gender, applying gender quotas to their electoral system and setting up women's councils with the aim to advise local policy making agencies on women's issues and educate women about participating in politics (Burnet 2008: 361, 368). Research shows however that the rural population regardless of gender did not understand the purpose or role of these councils, making them more decorations for foreign appraisal than actual democratic grassroots features (ibid.: 368-9).

UNEP considered the country's recovery from the 1994 genocide to be a success story (UNEP 2011: 6). The intrastate ethnic conflict contained a high degree of sexual violence with estimations of up to 500 000 women having been raped during the conflict (Ephgrave 2015: 183). Women's organisations has since the genocide taken a leading role in societal reconstruction and helping women regain control of their lives by providing basic essentials and acting as a new social support system when there was no functioning ones left (Burnet 2008: 371-2). Still, female headed households in Rwanda remain among the poorest groups in society. Rural areas were at the time of the assessment especially targeted by poverty, where about 65 % of the population lived in poverty. Agriculture was the foundation of the economy, making landless people especially vulnerable (IFAD 2012c). Still, after the conflict the country experienced a rapid urbanisation as people returning from refugee camps sought security in the cities (UNEP 2011: 255).

The UNEP assessment was made several years after the genocide with the aim to be a flagship for future environmental assessments to follow and provide constructive recommendations for a sustainable progress towards the national development goals (2011: 7, 12). The team included ten experts in one or more of the eleven areas making the chapters of the report, among which one had the role to mainstream gender in all fieldwork (ibid.: 50).

### 4.4.1 Prioritised Areas

The prioritised areas in this assessment were based on eleven themes, divided into *Cross-cutting issues* (including environmental aspects of conflict, peacebuilding, population displacement, resettlement, and disasters and climate change) and *Sectoral issues* (agriculture and land degradation, forest resources, water resources, wildlife and protected area management, energy, urban environment and health issues, and industry and mining) (UNEP 2011:15). These themes were outspokenly deemed the “(...) most critical environmental issues facing the country” (ibid.: 49). Gender, as well as environmental cooperation on a regional scale, was both said and found to be incorporated in all fields.

As the assessment was made a considerable long time after the conflict in question, this research focused mainly on how the environmental effects from the conflict and their effect on society in turn were addressed. The overall finding claimed in the assessment was that the direct environmental effects from the conflict are low, whereas the secondary effects are all the more immense (UNEP 2011: 64).

One of the few direct impacts the conflict had on the environment were the further limitations landmines put on an already limited land area. The clearing of landmines that had already been made proved to not only unlock fertile soil, but also provide possibilities to designate new land areas to vulnerable landless families (ibid.: 65). These kind of societal connections to environmental reconstruction activities was seen throughout the report.

Population displacement stemming from the conflict was put forward as one of the major indirect causes of environmental degradation, having around three million people transported in and out of the country. Deforestation and intrusion on protected land areas was necessary to make room for the displaced masses, and was then continued when they needed resources for the shelter livelihood most notably firewood (ibid.: 60, 65). Estimations claim that the deforestation from firewood gathering from only five could be up to ten hectares a day.

A further gendered problematisation of the deforestation and firewood collection was brought up. The vulnerabilities women living in these camps face when they, as traditionally in charge of household chores, have to walk further and further to collect firewood is analysed and problematised as the exposure from walking far outside the camp site is a considerable safety risk (ibid.: 83-86). This was the only report out of the ones presented in this paper that recognised the intersection between different vulnerabilities on refugee camp sites.

It is however not only the environmental impacts from shelter camps that were addressed. The resettlement of people is noted to have had severe impacts on the environment, as the large masses of people had to share very small spaces of available public land and also intrude on previously conservation protected areas (ibid.: 81).

Other topics that were brought up are water scarcity, waste management, sanitation issues, all of which have high impact on women’s daily life and amount of unpaid labour (ibid.: 187, 265, 268). On all issues, elaborate descriptions of how each have gendered effects are presented. The report also featured 15 in depth case studies on the context specific social and environmental status of different issues, in addition to the introductory summary of the country context,

showing even further awareness of the need for situation tailored approaches rather than one size fits all solutions.

Finally, the report also noted the conflict caused loss of both human and institutional capital for environmental issues (ibid.: 66). This opportunity for vulnerable stakeholder inputs was not wasted in the recommendations, as will be evident in the next section.

#### 4.4.2 Recommendations

The target audiences for the recommendations provided by the UNEP assessment were governmental officials with legislative power and development partners to the country, but the findings were believed to be relevant in advocacy purposes to civil society and NGOs as well. Furthermore the report highlighted the need for the private sector to actively engage in implementing the recommendations, in order for reconstruction to be successful (UNEP 2011: 48). The recommendations are, according to themselves, aimed at strengthening social unity and peace through sustainable and strategic environmental reconstruction (ibid.: 318).

The UNEP assessment acknowledged local expertise by performing what was referred to as stakeholder consultations, meaning interviews and discussions with actors ranging from government officials to households (ibid.: 51). They showed great awareness of the importance of an inclusive approach and repeatedly referred to interviews with locals during field work to obtain further insight in the situation and illustrate what the population found to be the most pressing challenges (ibid.: 51, 62). This goes well together with the environmental opportunities for peacebuilding often brought up in environmental security literature, helping to bridge the gap between gender and environment in security studies (see e.g. Krampe 2014).

A large part of the report was the cross-cutting view between peacebuilding activities and environmental reconstruction, and it recognised four distinct ways this could be made in the Rwandan context. These included improving livelihoods through ecological rehabilitation; land tenure reforms specifically aimed at women left responsible for entire families and extra workloads after the conflict; disaster risk reduction to reduce the likelihood of climate change induced conflicts; and improving the conditions in the refugee shelters, addressing specifically resource scarcities to limit the risks of water and firewood gathering for women (ibid.: 67-9). It goes almost without saying that these findings are outstanding from a gender point of view.

A lot of the recommendations were aimed at strengthening the environmental capacity of the country by encouraging the government bureaus to inform the people of more or less everything environmentally related (321). Furthermore, local participation on resource management was encouraged to decentralise the reconstruction and make it locally owned to as large an extent as possible (ibid.: 71, 170).



### 4.4.3 Inclusion of Women

One of the ten experts was a woman, with expertise in gender matters. The only other woman in the assessment team was the report editor (UNEP 2011: 371).

Excluding findings which regard statistical information about fertility and population, women were specifically mentioned 73 times out of which 63 focused on women as vulnerable and six put forward ideas or emphasise the need to strengthen women's roles in these areas (UNEP 2011). The latter included connecting the larger impact of poor sanitation has on women to the urgent need for their strengthened decision-making role on sanitation issues and water management; making women priority in cash- for environment projects to strengthen them as stakeholders and limit their vulnerabilities; and emphasising the importance of including women and youth in community development committees (ibid.: 128, 184, 193, 265).

Out of the 15 in depth case studies mapping the local context on varying issues, five were explicitly dedicated at presenting the role of women or gendered differences on that particular issue, ranging from women's role in mining to the agricultural challenges women headed households face (ibid.: 128). Not only did they present the differences in experience from environmental degradation between the sexes, but they also recognised different vulnerabilities within the group women, based on socio-economic status.

All in all, the recommendations showed awareness of the intersections between peacebuilding, the environment and gendered vulnerabilities. It should be noted, however, that the gender angle of the recommendations are lost in all fields in the concluding summaries of the findings (ibid.: 323-325).

## 4.5 The Philippines

The Philippines is an island group in Southeast Asia, neighbored by Indonesia, Taiwan and Vietnam. Ranked 9th in the World Economic Forum's 2014 Global Gender Gap Index, the country is often viewed as a forerunner for gender equality. However, studies show that Filipino women still suffer from occupational inequalities and wage gaps, despite the equal access to education and healthcare. This discrepancy in employment outcomes takes the highest hit on low educated women (Barua Yap II & Melchor 2015: 276-7).

The country experienced strong urbanisation at the time of the assessment, adding to the already large slums surrounding large cities such as the capital Manila and Tacloban. Inadequate houses and lacking infrastructure in combination with the residents' already poor socio-economical condition make these areas very exposed and vulnerable to natural disasters (Morin et al. 693). Around 80 % of the population lived in rural areas and some of the poorest groups among the these already poor areas were indigenous people, landless workers and women (IFAD 2012d).

The violent typhoon Haiyan hit the Philippines the 8 November 2013 and completely destroyed all buildings and infrastructure in its way, killed over 6100 people and displaced 4.1 million. Experts estimate the storm to be among the strongest ones in recorded history (UNEP & OCHA 2013: 4, 7). The areas worst hit were the Eastern Visayas, including the densely populated city of Tacloban (Mas et al. 2015: 805).

The UN operation was accepted the day after the storm first hit the country and UNEP immediately listed food and shelter as top priorities in the plead for international financial assistance. In contrast to other natural disasters such as tsunamis, typhoons can be predicted and In a joint environmental unit with the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), UNEP put together an emergency assessment report with recommendations based on the findings of the OCHA branch United Nations Disaster Assessment and Coordination (UNDAC). Only one UNDAC expert was performing the assessment which worked as the base for the recommendations for reconstruction (ibid.: 8).

#### 4.5.1 Prioritised Areas

The areas mentioned in this assessment, which specifically looks at the risks the typhoon impacts had on human health and the environment, are industrial facilities and the need to find appropriate areas for relocation of people in districts at high risk of geo-hazards (UNEP/OCHA 2013: 8-10).

The industrial facility assessment mainly focused on an oil spill in the Iloilo province. It was connected to both the environmental degradation following the oil spill, such as coast and mangrove contamination, but also the human health effects including both the workers of the clean-up operation and the local residents (ibid.: 10). It was noted that the oil spill had a large effect on those whose livelihood depend on ocean related incomes like fishing and tourism, which shows awareness of the societal effects of their prioritised areas (ibid.: 11). What was being done to mitigate the spill effects was not elaborated further than that the actions were appropriate.

Second, temporary shelters and geographical zones at risk of future hazards are addressed. An aerial assessment mapped possible locations for resettlement of population in especially vulnerable areas, focusing on Tacloban (ibid.: 12).

Water accessibility was addressed by problematising the use of hand pumps which generally only reach shallow water resources likely to have been affected by the typhoon. A water assessment had not been made at the time of the assessment, and was not made during it, but the threat posed to locals, and especially children, using water collected from these hand pumps was recognised. The report explicitly noted the risk of waterborne disease that disaster waste could cause, and how it would target primarily people performing household chores such as bathing, cooking and washing (ibid.: 12-13). Although not explicitly put in writing, this highlights the differing societal occupational vulnerabilities. Furthermore, it is evident that interviews with locals were made in regards to their

awareness of the water risks, which indicated that they were aware of the risks consuming the water from the pumps (ibid.).

Four industrial facilities were assessed. The typhoon damage was found to have little or no effect on human health on one of the two facilities located in Tanauan, and thus deemed not requiring further assessment. The other one, a coconut oil manufacturing facility, was more thoroughly examined as the damaged tanks potentially could pose a health risk to the people that had taken shelter nearby the facility. The remaining two facilities were two oil storages in Tacloban. Neither was found to have experienced any major damage from the typhoon (ibid.: 15-18).

Finally the poor placement of the Tacloban dumpsite was addressed, highlighting its health risks for the rural population living downstream from it.

#### 4.5.2 Recommendations

The recommendations following the assessment recognised the need to carefully plan temporary shelters in accordance with existing geo-hazard maps as well as the findings of the assessment. It was encouraged that the planning and actual resettlement is made in close contact with the Mines and Geosciences Bureau of the Philippines, which has previously been in charge of geo-hazard mapping (UNEP/OCHA 2013: 12).

Recommendations also stressed the need to address the affected livelihoods in the reconstruction process, recognising the need to focus on the private and not strictly public matters. What and how this should be done was however not elaborated. Furthermore, the report emphasise the need to monitor water resources, assess the low standards of dumpsites and safely manage the debris that was created during the typhoon (ibid.: 4-5, 19). The oil spill was not addressed, missing an opportunity to encourage vulnerable stakeholder agency in the local context.

#### 4.5.3 Inclusion of Women

There is no mentioning of women, men or other clear signs of awareness of different vulnerabilities within the affected population, other than that of those in shelters near toxic sites (UNEP/OCHA 2013: 15). The one expert performing the assessment was male.

## 5 Discussion

The different cases illustrate the general lack of a cohesive gender approach within UNEP's environmental reconstruction assessments. The report for Rwanda was without doubt well thought through from a gender perspective, whereas the other three required significant reading between the lines. Although this research is not extensive enough to draw theoretically tenable conclusions of what factors affect gender inclusion in the environmental reconstruction assessments, a few things can be said about the findings.

First, the types of crisis causing the environmental degradation does not seem to have any effect on the gender inclusiveness of the assessment, and neither does gender equality of the government. The only two reports in which women were explicitly mentioned were Rwanda and the Maldives, which share no similarities based on the table used to illustrate the chosen cases. However, both the 2004 tsunami and the Rwandan genocide received a lot of international and media attention, which possibly could have affected the scope of the reports based on the interests of the audience in mind. This potential connection would however require a study of its own and backing of significantly more cases.

Second, the difference in both report length and approach could have effect on the contents. The joint UNEP/OCHA environment unit had a clearer focus on mending the most acute areas and has a significantly shorter report, which could indicate an incentive to get the report out as quickly as possible. However, at the time of the assessments, OCHA was the only organisation with an active gender action plan introduced already in 2005 and since then revised several times, including gender mainstreaming objectives for the branch UNDAC which was the ones performing the assessment in the Philippines (UNOCHA 2010).

The *tyranny of the urgent* may have had a role in the results beyond that of the rushed UNEP/OCHA report. The overwhelmingly larger gender inclusion and elaborations regarding the reconstruction in Rwanda could be connected to the non-acute nature of that particular report in contrast to the other. Furthermore, as the assessment of the post-conflict environmental status of Rwanda was part of a larger development investment of the Rwandan government, the term development may have played a key role in the assessment request since it directly ties to the UN Millennium Development Goals in which gender equality and empowerment of women makes up one eighth (UNGA 2000). This direct connection between gender and development has obviously not yet been institutionalised in regards to gender and the environment, which is why further research on the matter is vital.

The method used in this study proved sufficient to effectively map the report content in regard to gender. As the method was a structured text analysis applied to the reports, the study is not believed to have received a different result using a

another method. The method of choosing cases is believed to have sufficiently illustrated the incohesive gender approach, but, naturally, more cases would have given even more nuance to the results. However, adding more cases would have required less in depth analyses, and using only a quantitative text analysis counting words would have missed out on important gender dynamics in the assessments and therefore provided a different result.

All in all, this study has illustrated the need for a gender mainstream approach in environmental assessment in order to limit the risk of gender being included solemnly by chance.

## 5.1 Future Research

Future research in this field could take into consideration the new gender report from UNEP and include cases after its publication for comparison to see if it has made any difference in approach. It could also examine more cases and institutions in order to develop a more sophisticated approach to case studies in the field of gender and environmental security studies, or alternatively go more in depth with one or more of the chosen cases and include the government's response to the UNEP recommendations in order to better understand their value. Continuing the mapping of gender inclusion in environmental assessments started in this study by adding more cases and institutions would build a solid groundwork for policy recommendations for action, both acute and less urgent, in inevitable coming extreme weather conditions.

## 6 Conclusion

This study has aimed at mapping the gender inclusion of UNEP's environmental reconstruction assessments prior to their introduction of their gender mainstreaming initiative 2016. Not only has this illustrated the lack of a cohesive gender approach in the leading environmental agency in the world, but it has also paved the way for future research analysing whether the new gender report has made any difference in actual fieldwork.

UNEP has not prior to the 2016 gender project completely ignored gender aspects. This research shows that their various post-crisis environmental reconstruction assessments have taken gender into consideration to certain extents, demonstrated by the four different cases in this study. The comparing factors used, equality of the government and type of crisis, proved not to themselves be sufficient to explain the differences in gender approach of UNEP. However, the research method used turned out to be an effective way to map gender in the assessments.

In conclusion, the varying approach to gender inclusion in UNEP's environmental reconstruction assessments signals the need for gender mainstreaming in both the academic and political sphere of environmental security.

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