DISSERTATION

# ENVIRONMENTAL SECURITY:

# A SOURCE OF LEGITIMACY AND CONTESTATION IN GLOBAL ENVIRONMENTAL GOVERNANCE

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ABSTRACT

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Environmental security is an increasingly popular concept though which various actors seek to understand and articulate the urgency, risks, and vulnerabilities associated with dangerous socio-environmental changes. Such urgent shifts include rising temperatures, droughts, floods, intensifying weather-related disasters, land-use changes, and the expansion of exploitative and extractive practices, all of which can be said to pose significant dangers to a vast range of political communities and systems under the broader rubric of environmental security. The consequences of turning to the logic of security, however, are heavily debated among those who both espouse and reject this conceptual linkage. Thus, this dissertation seeks to dig deeper into the *ways security is conceptualized, leveraged, and contested across certain domains of global environmental politics*. Specifically, I contribute three empirical studies that each employ critical discourse analysis to highlight distinct connections between the environment and security as they emerge across different state and non-state actors, including governments, IGOs, NGOs, TNCs, and resistance movements. I focus on the Food, Energy, Water (FEW) security nexus as an over-arching arena of global environmental politics in which such actors frequently draw upon securitized language to describe environmental problems and their potential solutions. I find that 1) elite actors including state representatives, NGOs, and IGOs designing the FEW security nexus agenda position scarcity as the main threat and private sector actors as key agents of

environmental security; 2) environmental security is leveraged in unique ways as a source of legitimacy by TNCs operating across the FEW nexus; and 3) resistance movements can generate contradictory and alternative visions of environmental security and legitimacy that challenge prevailing and unequal systems of governance. I conclude that the emergence of the FEW security nexus as global development paradigm presents a particularly important opportunity to interrogate processes and performative implications of securitization (both oppressive and emancipatory), build upon alternative, bottom-up visions of environmental security, and reflect upon the changing role of the state in relation to both security and global environmental politics more broadly.

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TABLE OF CONTENTS

ABSTRACT……………………………………………………………….………………..…ii
ACKNOWLEDGEMENTS…………………………………………………………………....iv
LIST OF FIGURES..………………………………………………………………………..vii
LIST OF ACRONYMS……………..……………………………………………………..…viii
CHAPTER 1. INTRODUCTION…………………………………………………...……….…1
Securitization and Legitimation: Toward a Deeper Understanding of Environmental Security……...……………………………………………………………………….…3
Theoretical and Empirical Contributions……………………..……………………………..7
Plan of Dissertation……………………………………………………………………....10
CHAPTER 2. LITERATURE REVIEW…………………………………………………….....15
Environmental Security: Current Debates……………………………………………....…15
Global Environmental Governance: Legitimacy in the Transnational Sphere…………..23
Transnational Governance……………………………………………………….24
Sources of Legitimacy……………………………………...………………….28
Critical Security Studies: An Overview………………………………………..……..…34
Conceptual Questions and Tensions……………………………………………………......41
Governance gaps……………………………………………………………......42
Democratic principles………………………………………………………..… 43
Structural Forces……………………………………………………………......44
Audience……………………………………………………………………......46
Conclusion………………………………………………………………………………47
CHAPTER 3. THE FOOD, ENERGY, WATER SECURITY NEXUS…………………...…51
Emergence of the FEW Security Nexus……………………………………………......52
FEW Security Nexus Approaches………………………………………………….…54
Mainstream Perspectives……………………………………………………….....55
Critical Perspectives……………………………………………………………...58
A Critical Systems Perspective of the FEW Security Nexus……………………………61
CHAPTER 4. CONCEPTIONS OF SECURITY IN GLOBAL ENVIRONMETNAL DISCOUSRES: EXPLORING THE FEW SECURITY NEXUS……………………………….69
Discourses of Environmental Security……………………………………………………..71
Securitization of the Environment……………………………………………………… 73
The FEW Security Nexus………………………………………………………………..77
Methods………………………………………………………………………………….78
Analysis and Discussion………………………………………………………………....82
What is the nature of the threat?..........................................................................83
What or whose security is most at stake?...........................................................86
What should responses look like?.......................................................................88
Who are the agents of security? ………………………………………………....90
Conclusion: Power and the FEW Security Nexus…………..…………………………...93
CHAPTER 5. ENVIRONMENTAL SECURITY AS A SOURCE OF NON-STATE LEGITMACY: AN ANALYSIS OF CORPORATE GOVERNANCE………..………………96
Environmental Security…………………………………………………………...100

Global Environmental Governance and Critical Security Studies: Perspectives on Legitimacy and Power.........102
Transnational Source of Legitimacy.........103
Power of Security.........105
Conceptual Synthesis: Environmental Security as a Legitimating Discourse.........106
Governance Gaps... .........107
Democratic Principles......... 108
Structure.........108
Audience.........109
Methodology and Case Description.........110
BP.........111
Nutrien.........113
Veolia.........115
Results: Environmental Security as a Source of TNC Legitimacy.........116
Governance Gaps.........117
Democratic Principles.........119
Structure.........121
Audience......... 125
Conclusion.........127
CHAPTER 6. ENVIRONMENTAL SECURITY: COUNTER NARRATIVES FROM THE PERSPECTIVE OF STRUGGLE?.........131
From a Passive Audience to the Politics of Struggle.........134
Environmental Contestation.........136
Case Selection: Our Water Our Right......... 138
Analysis and Discussion.........141
What is the nature of the threat?.........140
What or whose security is most at stake?.........146
What should responses look like?.........148
Who are the agents of security? .........151
Conclusion.........154
CHAPTER 7. CONCLUSION.........156
Summary of Findings.........156
Theoretical and Empirical Contributions.........159
Environmental Security and Global Environmental Governance.........161
Environmental Security as a Source of Legitimacy.........164
Securitization as a Contested Process.........166
Role of the State.........166
Practical Contributions.........169
Directions for Future Research.........170
REFERENCES.........173
APPENDIX: LIST OF DOCUMENTS.........193

LIST OF FIGURES

Figure 1. FEW security nexus concept map…………………………………………….……….65
Figure 2. Word Cloud Bonn conference and IRENA report…………………………….………79

LIST OF ACRONYMS

CAPPA – Corporate Accountability and Public Participation
FEW – Food, Energy, Water
IFPRI – International Food Policy Research Institute
IGO – Intergovernmental Organization
IMF – International Monetary Fund
IR – International Relations
NGO – Nongovernmental Organization
OWOR – Our Water Our Right
TNC – Transnational Corporation
UN – United Nations
US – United States
WEF – World Economic Forum
WTO – World Trade Organization
WWF – World Wide Fund for Nature

# CHAPTER 1. INTRODUCTION

The field of global environmental governance is concerned with both theoretical and practical transformations shaping planetary politics. A key objective across much of the literature is unpacking the political relationships that provide context to environmental debates and decision-making. This scholarship at times challenges conventional approaches to international relations that focus on the behavior of unitary states and their authority over bounded territories. Instead, those seeking to bring the complexity of global environmental politics to bear raise questions about the interrelatedness and power of various actors including states, non-governmental organizations, hybrid partnerships, inter-governmental organizations, transnational corporations, and social movements (Betsill et al. 2020). Insights into this diverse architecture of environmental governance often generate cross-border perspectives attuned to the globalized dimensions of social organization, making the transnational sphere a crucial area of consideration for environmental politics. The increasing prevalence of transnational perspectives also serves as a testament to how this ecological moment problematizes long-standing political concepts that are deeply rooted in state-centric histories. It is in this transnational context that I seek to situate the contributions of this dissertation. Specifically, I focus on the transformed meaning and practice of security as security politics adapt to fit the transnational topography of global environmental politics.

Security is an idea that has, for centuries, remained tied to matters of the state and its citizens but is now taking on a more multi-dimensional form, especially as it relates to cross-border environmental issues (Swatuk 2014; Floyd and Matthew 2013; Barnett 2001). Although many scholars have analyzed the reconceptualization of security as it changes to meet

contemporary environmental conditions (Dalby 2017; Leese and Meisch 2015), there is still much to understand about how evolving conceptions of security are connected to new forms of authority that extend beyond the traditional jurisdictions of statecraft. This dissertation, therefore, takes on a transnational perspective to account for the wider assemblage of global actors engaging with environmental security as a contested concept. More specifically, my goal is to understand how security discourses shape the allocation of authority among various actors as such discourses become increasingly enmeshed within the broader matrix of global environmental governance.

In doing so, this dissertation aims to make a theoretical contribution to critical security studies by clarifying how security discourses circulate through uniquely multi-scalar and cross-border domains of global environmental politics. At the same time, a key objective of this project is to explore how different formulations of security influence structural aspects of global environmental governance, particularly the empirical architecture of authority within which agency over environmental decision-making is constructed and contested. While embracing a critical approach that emphasizes the interplay of power dynamics across both structural and agential elements of governance, I remain interested in the role of security in maintaining or rupturing established power relations. Therefore, I trace the articulation, reception, and impact of transnational security discourses from both hegemonic and counter-hegemonic perspectives. My main question, then, considers how security discourses are imbricated in the evolution of transnational governance systems beyond the power dynamics of state-centric administration, and specifically asks*, how are environment-security connections conceptualized, leveraged, and contested in certain domains of global environmental governance?*

In answering this question, I seek to elaborate on the relevance and importance of analyzing security as a productive force shaping the politics of legitimacy within global environmental governance. In this regard, rather than serving as a mere description of things, I focus on the discursive construction of security "as a principle of formation that does things" (Dillon 1996: 16). Discourses of security, for instance, can define threats and risks in such ways that legitimize certain actors, justify urgent decisions, or shape the contrast between "insiders" and "outsiders"– bearing significant implications for the political organization of authority and power. At the same time, a burgeoning area of critical security studies focuses on the unmaking or restructuring of security logics. This literature highlights the underrecognized political agencies that permeate spaces of resistance (Montesinos Coleman and Rosenow 2016; Isin and Rykiel 2007; Huysmans 2014). Therefore, I draw from critical perspectives regarding audiences of both securitization and legitimation to foreground the inter-subjective processes through which security politics unfold.

In the remainder of this chapter, I justify my emphasis on securitization and legitimation as key concepts through which I seek to understand significant changes across global environmental politics, and then preview my contributions to better understanding each as a contested political process. I conclude by outlining a roadmap of the dissertation.

## Securitization and Legitimation: Toward a Deeper Understanding of Environmental Security

The broadening of security beyond traditional, state-centric concerns is, at this point, a widely recognized and debated subject among scholars of international relations and global politics. The relationship between security and global environmental governance, however, is

underexamined and analyses that seek to clarify connections across globalization, ecology, and authority must consider the significant relevance of security politics. Accounting for the role of security in the context of global environmental governance not only renders certain discursive designations of threat, risk, and other visible, but also illuminates broader social mechanisms through which the distribution of power over ecological futures is constructed and contested. This dissertation, therefore, explores the articulation of security within the transnational domain of environmental governance and interprets the associated implications for legitimacy as it operates beyond the state-citizen relationship.

My purpose in emphasizing legitimacy as an analytical focal point is to address the often-elided question of who gains authority over security as a result of the discursive shift towards cross-border, environmental "threats." As McDonald (2013, 47) points out in his analysis of climate security, discourses that attempt to decenter military preparedness in favor of a more holistic view of the structural inequities that underlie environmental vulnerabilities fail to provide a clear picture of agency, which often leads to antiquated and harmful development narratives that suggest such forces are beyond the control of "vulnerable" communities. The subsequent academic critique contends that muddled ideas of agency leave space for the state apparatus to reassert itself as the main arbiter of a cosmopolitan security where the use of force, undemocratic decision-making, and neoliberal policymaking prevail (Dillon and Neal 2015; McDonald 2013; Dalby 2002). This perspective, however, is limited by its circular concern with security as an implicitly state-centric political concept—though it poses a critical analysis of power relations that stem from the hierarchies of national interest, it remains tied to the idea that the politics of security are deterministically susceptible to the authority claims of elite governmental and intergovernmental actors. My goal is to expand the analytical plane of critical

security studies to include transnational spaces of global environmental governance where the relational function of security, who it serves and to what ends, is in political tension among a wider range of actors than previously conceived.

The transnational sphere of environmental politics provides a particularly stark challenge to traditional interpretations of the expansion of governmental authority during times of crisis. Throughout this dissertation, I seek to contribute a particular understanding of the political debates, discourses, and processes that infuse this transnational realm with meaning, a space which is comprised of "subnational or nonstate actors that form links and engage in political contestation across national borders" (Hale 2020, 12). As environmental security discourses, for instance, increasingly frame ecological issues in terms of threats and heightened risks, the multi-actor and relational character of human-nature politics interrupts the territorially bounded foundations of state-centric security and opens the door to a more multiplied range of engagements with the politics of security. In this context, I seek to explore how both state and non-state actors shape debates about who can or should provide environmental security and for whom. In such transnational articulations of environmental security, the citizen-state relationship that characterizes traditional security discourses is reformulated within a distinct, cross-border security rhetoric, where the circulation of environmental harms impacts both humans and nature as they exist within and outside of delimited territories.

On a broader scale, transnational security discourses give form to the order of global relations in which subjects of environmental governance are constructed, legitimized, or delegitimized. The language of environmental security, for example, is intertwined with articulations of who or what is considered deviant according to hegemonic norms that govern global environmental politics (Dalby 2012; Bigo 2008). Therefore, as the territorial paradigm of

security becomes overshadowed by a globalized imaginary where risks, threats, and vulnerability are contingent on the circulation of ecological systems, the mechanisms through which security discourses shape legitimacy also change. This is not to say that security becomes more or less deterministic, but that the politics of security takes on a different character when fixed notions of territory no longer ground ideas about protection, defense, or safety. In deciphering these changes, it is important to reconsider processes like securitization and legitimation in light of globalized and systemic relations. This dissertation, therefore, seeks to extend securitization theories such as Copenhagen, Paris, and Welsh perspectives to include a deeper analysis of how securitization operates in relation to cross-border environmental issues and across various state and non-state actors. In this vein, my goal is to bring forward the complex ways securitization results in particular and unique processes of legitimation in environmentally focused discourses, thus providing empirical basis on which to argue whether environmental security helps or hinders certain governance objectives. Examining the political consequences of securitization, especially in terms of who or what is legitimized and how, can ultimately unveil how security shapes the contours of global environmental governance in helpful or problematic ways.

Moreover, a transnational view of legitimacy in relation to environmental security brings to the fore wider, epistemic ordering principles of power that impact both hegemonic and counter-hegemonic contours of global environmental politics. Therefore, while this dissertation seeks to understand how environmental security discourses can legitimize actors and systems that reinforce unequal and oppressive power relations, I also focus on the intersubjective processes through which counter movements contest or propose alternatives to predominate modes of securitization and legitimation. Thus, this dissertation embraces the notion that the audiences on the receiving end of authority claims (in this case over environmental security) play

a crucial role in challenging or accepting their credibility and implications (Bexel and Jönsson 2018; Gregoratti and Uhlin 2018; Scholte 2007). Additionally, rather than following a linear path from the security speaker to those who are vulnerable or impacted by urgent decisions, I extend the argument that securitization involves a set of negotiated relations that take shape within broader struggles for environmental justice and equity, wherein multiple actors can inform and contest the trajectory of securitization (Côté 2016). To this end, this dissertation offers a multi-scaler and systemic interpretation of the entangled political disputes that give form to varied meanings and practices of environmental security.

**Theoretical and Empirical Contribution**

Overall, this dissertation makes both theoretical and empirical contributions to wider conversations about the state of global politics amid intensifying environmental change. More specifically, I contribute to crucial debates concerning four key topics: 1) the performativity of environmental security 2) evolving sources of legitimacy among non-state actors 3) the potential for alternative modes of securitization, and 4) the role of the state in global environmental affairs.

In particular, this dissertation provides an empirical analysis of environmental security as a contested concept as it emerges within the FEW security nexus (see Chapter 3). In doing so, I contribute a foundational understanding of how environmental security is conceptualized in one of the foremost political spaces in which environmental issues are increasingly securitized at the global level by a plethora of state and non-state actors (Srivastava and Mehta 2014). The FEW security nexus offers a particularly compelling and important case in which to focus on the ways environment-security connections influence global governance agendas that are largely designed

and implemented by elite actors, and at the same time, provides analytical routes toward understanding resistance against such agendas. Therefore, I consider the FEW security nexus a relevant political arena in which its proponents and stakeholders imbue environmental security with meaning and leverage the political implications of securitization to legitimize or delegitimize certain modes of environmental politics. The specific actors I focus on throughout this dissertation who engage in debates about environmental security as it relates to the FEW nexus include those involved in the pivotal Bonn 2011 conference (the German government, the International Food Policy Research Institute (IFPRI), the World Economic Forum (WEF), and the World Wide Fund for Nature (WWF)), transnational corporations including BP, Nutrien, and Veolia, and the Our Water Our Right (OWOR) movement against water privatization. In understanding how these different groups construct and contest environmental security discourses, I provide empirical insight into the performative consequences of environmental security from both a dominant perspective that privileges market-oriented responses, and a counter-hegemonic perspective that challenges prevailing, risk-prone structures of neoliberalism.

Second, this dissertation contributes theoretical insight into how transnational sources of legitimacy are evolving amid a globalized world order. Specifically, I show how environmental security discourses play a role in allocating authority to private, corporate actors who other elite actors deem capable of responding to concerns about intensifying resource scarcities across food, energy, and water sectors. I then highlight how TNCs can leverage this positionality to claim authority over environmental security on a transnational scale, while seeking to enhance their legitimacy and status as important global governors of society's most pressing issues. Therefore, this dissertation adds a nuanced understanding of how non-state actors acquire authority through the framework of environmental security, and also contributes to an understanding of the

complex sociological processes that give form to the architecture of transnational governance more broadly.

Third, I attempt to expand traditional perspectives of securitization theory to include more detailed attention to counter claims. Specifically, I focus on counter-narratives that challenge prevailing articulations of environment-security connections propagated by elite state and corporate actors operating across the FEW security nexus. In this context, I provide empirical analyses that expose alternative modes of securitization leveraged by resistance movements who view privatization rather than scarcity as threatening. This contribution is in part a response to Floyd's (2020, 228) claim that scholars focusing on environmental security are in a position to enhance theories of securitization by extending insight into the inter-subjective processes through which various stakeholders express their interests in securitized terms. Rather than solely focusing on elite actors leveraging securitization to make undemocratic decisions, this dissertation instead shows how securitization can serve more emancipatory aims oriented toward justice-oriented issues such as the human right to water. Thus, I also extend Tulumello's (2018) theory of agonistic security— in which subjects are responsible for politicizing what it means to be secure in certain exploitative contexts— into the realm of environmental politics and specifically into the empirical domain of the FEW security nexus.

Finally, this dissertation contributes insight into the changing role of the state in contemporary global environmental politics. As environmental change challenges traditional conceptions of security, expectations of territorially bounded states so too evolve amid calls for a planetary governance. In this context, I seek to unravel the implications of traditional state-centric security logics giving way to globalized notions of what it means to be secure in the face of proliferating environmental "threats." I argue that this crucial shift in global politics has

inevitable implications for state relations and analyze this claim by investigating how legitimacy processes take shape beyond state borders in the context of environmental security (Bernstein and Cashore 2007; Bernstein 2011). In doing so, I show how legitimacy processes leveraged by TNCs draw upon certain "de-territorialized" claims pertaining to transnational environmental security. Overall, I ask who or what is legitimized by distinct environmental security discourses and at the same time interpret how emerging legitimation techniques are shaping the architecture of global environmental politics by allocating authority in new ways across state and nonstate actors.

## Plan of Dissertation

This dissertation investigates how environment-security connections are conceptualized, leveraged, and contested in global environmental governance. More specifically, I analyze how security is conceptualized within the FEW security nexus development paradigm, how this particular conception of security informs legitimacy claims among TNCs, and how it also faces contestation and reformulation among subjects-in-resistance. Chapters 4, 5 and 6 were prepared as stand-alone articles intended for publication, resulting in some unavoidable overlap across each chapter.

Chapter 2 reviews the literatures on global environmental governance, critical security studies, and environmental security, and raises unique questions regarding the relationship between securitization and the landscape of global environmental politics. I first introduce environmental security as a relevant political discourse and empirical domain in which to analyze how new conceptions of security intersect with key governance processes (such as legitimation) in distinct and unprecedented ways. I then present global environmental

governance and critical security studies both as crucial areas of research that bring to bear important insights on globalized landscapes of authority, the changing nature of territorially bounded politics, and the relationship between power and security. Next, I synthesize key ideas from global environmental governance and critical security studies to contemplate how environmental security— in theory and in practice— can potentially influence the realm of transnational environmental politics, particularly across four key topic areas: governance gaps, democratic principles, structural forces, and audiences. This synthesis of literatures guides my analysis of the power-laden processes of securitization, legitimation, and contestation across the FEW security nexus.

Chapter 3 introduces the FEW security nexus as the overarching political arena on which this dissertation focuses. I detail the emergence of the FEW security nexus as a popular global development paradigm, and then outline both mainstream and critical perspectives regarding its implementation. After reviewing the FEW security nexus more broadly, I propose my own critical systems-thinking approach for moving the practice and understanding of the FEW security nexus forward, in which I argue that scholars must draw upon political, economic, and discursive systems-thinking to locate the pressing power relations that influence who governs FEW issues, how, and for whom.

Across the following three empirical chapters, I employ critical discourse analysis rooted in an interpretivist, qualitative, methodological standpoint. This approach to discourse analysis emphasizes the movement and influence of power within and across discourses (Taylor 2004). Critical discourse analysis also draws from poststructuralist perspectives of global politics by incorporating a reflexivity about how knowledge claims not only shape meaning but also produce and give form to subjectivities and objectivities within a particular "system of

formation" (Foucault 1972; Graham 2005). It is important to incorporate a critical and poststructural perspective for this project because both legitimatization and securitization as they relate to the environment operate through power dynamics and inform the way humans relate to one another and to nature in particular ways. Moreover, as Hajer and Versteeg (2005, 83) suggest in their reflections on the role of discourse analysis in environmental politics, debates about shared problems are increasingly taking places at a transnational level and "discourse analysts are well equipped to identify the new sites of politics and analyze the political dynamics therein." Therefore, I use critical discourse analysis to contemplate the constitutive political effects of language that permeate processes of legitimization and securitization within transnational spaces governing food, energy, and water issues. Each chapter expands upon the discourse analytic process used in that particular study.

Chapter 4 explores the FEW security nexus as a distinct political domain in which actors utilize security language to describe environmental problems and policy prescriptions. Using content and discourse analysis to interpret FEW security nexus reports, I conclude that this particular policy debate represents a unique departure from other environment-security discourses in that economic productivity is the main referent object rather than countries, individuals, or ecosystems. This deviation, I argue, shifts ties between legitimacy and security away from state- centric institutions towards private sector organizations, reinforcing technocratic responses to complex, structural, and unevenly distributed sources of human and environmental risk.

Chapter 5 examines how transnational corporations (TNCs) leverage and generate ideas about environmental security on a cross-border scale. Specifically, I explore the ways three TNCs — BP, Nutrien, and Veolia— turn to environmental security as a source of legitimacy in

their broader global environmental governance agendas. I find that these TNCs rely on particular notions of environmental security to validate their roles in filling governance gaps, promoting democratic principles, and mitigating planetary crisis, particularly to appease a primarily Western, elite audience. Ultimately, I reveal how environmental security concepts inform non-state legitimacy claims and advocate for a political economic perspective for understanding the wider implications of environmental security as a power-laden concept.

Chapter 6 attempts to understand how the securitization of environmental issues among sites of resistance influences global environmental politics, and whether counter narratives about environmental security challenge the legitimacy of corporate actors as agents of security across the FEW nexus. More specifically, I look to the Our Water Our Right campaign— a transnational resistance movement against water privatization— as a case in which counter-discourses shape the meaning of environment-security connections. I find that the Our Water Our Right movement positions privatization as the primary threat to water rights, which necessitates the protection of public services driven by state governments and the expansion of democratic participation. I discuss the implications of this threat narrative for both securitization theory and the potential transformative capacities of alternative security discourses. Ultimately, I argue that this case study introduces new ways to think through securitization processes in relation to the role of the state, the politics of crisis, and the agonisms that stem from sites of struggle.

Lastly, chapter 7 returns to the four theoretical and empirical contributions outlined in the previous section of this introduction to expand upon how this dissertation adds to contemporary perspectives on global environmental governance, critical security studies, and global politics more generally. I elaborate particularly on how this dissertation provides a unique analysis of the performative impacts of environmental security discourses on architectures of global

governance, the evolving sources of legitimacy found within environmental security discourses, alternative modes of securitization, and the role of the state in global environmental politics. Moreover, I suggest ways this dissertation can add to our current understanding of socio-environmental power relations as well as collaborative, cross-border action toward environmental justice. Finally, I point toward important gaps in this project and areas for future research.

# CHAPTER 2. LITERATURE REVIEW

This chapter introduces the main literatures I engage with in this dissertation. Namely, I draw insight and conceptual guidance from scholarship on global environmental governance, critical security studies, and environmental security. First, I review the research and debates about environmental security, its utility, and its theoretical foundation, as it is within the realm of empirical debates about environmental security where this dissertation contributes an analysis of how security operates at the level of transnational environmental politics. Next, I review the various mechanisms through which actors acquire or claim authority at transnational levels of global environmental governance. I then outline salient debates and insights from critical security studies, detailing how this literature sheds light on the emergence and persistence of certain relations of power that influence processes of governance and legitimation. Lastly, I conclude by highlighting important areas of tension related to governance gaps, democratic principles, structural forces, and audience, which each inform different aspects of my analysis of environmental security throughout this dissertation. In sum, these literatures contain the foundational debates about security, power, legitimacy, and the environment that I hope to contribute to in this dissertation by showing how environmental security discourses give form and meaning to architectures of global environmental governance.

## Environmental Security: Current Debates

Ultimately, my goal is to combine perspectives from both global environmental governance and critical security studies to better understand the performative impact of environmental security within the transnational realm of environmental politics. Given that

environmental security constitutes the empirical, discursive domain in which I seek to understand relationships between securitization and governance, it is important to situate this project within current debates about environmental security as a world political issue more broadly.

Environmental security is a relatively new concept that, in part, defies long-standing categories of the state, its responsibilities, and its territory. Theories of international relations have traditionally considered the provision of security as one of the defining relationships between citizens and their sovereign counterparts. Providing state-centric stability through militaristic defense, for instance, has held a long-standing reputation for determining the legitimacy of authority figures, and some analysts in the realist tradition of IR still employ this perspective in today's foreign policy debates (Mearsheimer 2001; Morgenthau 1972). A growing number of scholars, however, contend that global environmental change (among other contemporary trends) fundamentally defies interpretations of security that rely on fixed notions of the state and its unitary interests. Instead, the rise in wide-spread precarity stemming from abrupt socio-ecological change has prompted scholars to propose new ideas about the ways through which manifestations of (in)security disrupt territorial boundaries and the sovereign domain of countries (Deligianis 2012; Dalby 2009; Trombetta 2008; Barnett and Adger 2007; Conca and Dabelko 2002; Hay 1994). At the same time, other perspectives of environmental security remain tied to traditional representations of threat, risk, and competition, and thus operate within conflict-oriented systems of analyses (Busby 2008; Homer-Dixon 1991).

Historically, interest in global environmental change as a matter of "non-traditional" security studies proliferated as the end of the Cold War altered Western perceptions about the inevitability and predominance of "super-power" conflict. A global landscape characterized by

accelerated trade and production rather than hegemonic warfare created space in both security studies and international security discourses for the consideration of non-military threats like environmental change (Steger 2017; Buzan 1991; Homer-Dixon 1991). Frequently cited as a key indicator of the "broadening" of global security agendas, the 1994 UN Development Program formally introduced environmental security as a new component of the UN's wider outlook on human security issues (UNDP 1994). It is important to note that this discursive shift also coincides with expansion of neoliberal institutions like the WTO and the heighted participation of non-state actors such as the World Business Council on Sustainable Development (WBCSD) in global environmental affairs. Thus, this particular period of globalization arguably disrupted, if not re-aligned, many of the atomistic, state-centric categories that had informed centuries of security analyses, especially through the imposition of new configurations of environmental and economic politics.

Scholars and practitioners who embrace the analytical connection between the environment and security have since adapted their terminology to address a new suit of related "threats" including climate change, transboundary pollution, natural disasters, and resource scarcities (Floyd and Matthew 2013; Porter 1995). The scope and emphasis of such environment-security connections, however, remains deeply contested. Whereas some argue that an environmental security lens generates important insight into the vulnerabilities driven and exacerbated by environmental change (Hardt 2018; Conca and Debelko 2002; Barnett and Adger 2007; Homer-Dixon 1999), others caution against militarizing environmental politics, diminishing the rigor of security theories, and/or obstructing cooperative resolutions to shared environmental problems by invoking conflict-oriented perspectives (Levy 1995; Porter 1995; Deudney 1990). Moreover, projections of "water wars" and large-scale conflict over dwindling

resources have garnered attention across both popular media and academic settings, despite facing criticism for lack of empirical clarity (Stucki 2005; Allan 2002). Nonetheless, environmental security has come to represent a popular point of reference for making sense of the increasingly dire implications of environmental change, and the weight of security rhetoric has arguably elevated environmental issues to a realm of "high politics," where power and resources are more concentrated and available (Jayaram 2020; Hartmann 2009; Graeger 1996).

Much of the research that employs environmental security as an analytical approach remains invested in broader human security and peacebuilding aims. These approaches emphasize the capacity for environmental change to jeopardize rural livelihoods by disrupting access to natural resources upon which marginalized communities depend, potentially increasing the likelihood for scarcity-driven conflict (Barnett and Adger 2007; Homer-Dixon 1991). Studies on environmental peacebuilding explore the links between environmental stressors— such as prolonged droughts, floods, and land degradation— and underlying sources of political tension and violent conflict (Kalilou 2021). The ultimate goal of environmental peacebuilding research is to determine whether or how efforts toward improving shared environmental conditions might sustain livelihoods, aid peace processes, and mitigate violence in conflict-prone areas (Morales-Muñoz et al. 2021; Weinthal and Johnson 2018; Conca and Dableko 2002). The normative dimensions of this human-centric environmental security approach are largely guided by prevailing human security agendas in that the literature positions individuals and communities as the main referent objects of security and prioritizes the needs and rights of those who are most immediately affected by global environmental change. At the same time, environmental peacebuilding and human security perspectives are criticized by post-colonial scholars for projecting Western-centric interpretations of progress and "vulnerability" wherein poor and

powerless communities in the global South are dependent upon neoliberal interventions for their security, which both obscures and perpetuates global environmental injustices that stem from the lasting legacies of colonialism (Hardt 2018)

Research on climate security similarly focuses on protecting livelihoods and individual well-being in the face of environmental distress, but also contains its own set of distinct interpretations of environmental change, conflict, and security. The idea that climate change acts as a "threat multiplier," for example, has become a popular frame of reference within elite circles where scholars, development practitioners, and think tank intellectuals assess the degrees of causality between climate change and conflict (Gleick 2014; Busby 2008). In addition to threatening the safety of citizens domestically, Western countries including the United States often position climate change as a threat to foreign policy interests by focusing on how the impacts of climate change— such as natural resource scarcities or migration— can exacerbate regional instability in places like North Africa and the Middle East (Busby et al. 2014; Schafer et al. 2016). On a global scale, the climate-security nexus is gaining traction within diplomatic spaces like the UN, especially as scientific communities continue to call upon inter-governmental organizations for urgent action based on alarming projections of climate-induced disruptions (Hardt 2018; IPCC 2022). Thus, climate security as an analytical category brings to bear the geo-political dimensions of global environmental change and also motivates timely and concerted action toward addressing new, climate-driven threats. Actors who securitize climate change in this way, however, encounter criticism on the grounds that such perspectives promulgate various constructions of the "other" as dangerous (especially within the threat-multiplier domain) and justify interventionist strategies focused on structural adjustment across global South communities (Detraz and Betsill 2009; Floyd 2008).

With the aim of elucidating these concealed and sometimes pernicious implications of securitization, the literature on environmental security has expanded to include detailed critical analyses of the particular discursive modes through which actors connect environmental and security concepts (Floyd and Mathew 2013). This branch of environmental security studies is based on the notion the different articulations of environmental security have constitutive impacts on both the material and abstract contours of human-nature relations. As McDonald (2018, 154) points out in regard to climate security, "different conceptions of the climate change–security relationship can ultimately be located in different security discourses: frameworks of meaning with different conceptions of whose security is at stake; what threatens security; which actors are capable of or even responsible for providing security; and through what means." Distinct narratives about environment-security connections range from conflict-oriented appeals for heightened national security, human-centric concerns for those bearing the brunt of environmental change, cosmopolitan messages about preserving international stability, and ecologically aligned visions for the ethical defense of all ecosystems to which humans and nonhumans belong (Detraz 2012; McDonald 2013, 2018; Floyd 2015). It is important to explore the political consequences of such different interpretations of environmental security to understand how they mediate and inform the responses to environmental issues. Detraz (2012), for example, shows how warnings about population growth in environmental security narratives perpetuate gendered perceptions of environmental problems, wherein "poor women" remain disproportionately subject to invasive policies due to their reproductive roles in society.

Other critical approaches to environmental security underscore the mechanisms through which power permeates both environmental and security politics in an effort to reveal the wider implications of foregrounding or obscuring different facets of their confluence. Dalby (2017,

235), for instance, seeks to grasp the pervasive influence of security across contemporary political processes, arguing that security is not merely about "geopolitics" but instead "relates to the provision of the conditions for particular forms of life, the conditions for commercial life, the legal and social arrangements that perpetuate both private property and states." Thus, when constructed by the elite ruling class, environmental security narratives can invoke both routine and emergency politics that serve to uphold existing power relations, essentially safeguarding the industrial world order under which drastic ecological change has accelerated (Dalby 2017, 235). Drawing on Foucauldian perspectives of security and economy, Leese and Meische (2015) similarly argue that, rather than protecting the environment or those who are most vulnerable, securitizing environmental issues instead facilitates the ceaseless circulation of economic flows, as security operates to reinforce the biopolitical conditions necessary for productivity by modulating risks and threats in accordance with the priorities of neoliberalism.

Given such notable criticisms of prevailing constructions of environmental security, some scholars contemplate how the environment-security connection might be reappropriated toward more progressive aims. In this regard, Trombetta (2008) suggests that certain environmental security discourses can potentially supplant reactionary and defensive security strategies with preventative ideals that promote global coordination and resilience. On the other hand, Hardt (2018) tries to instill an awareness of the interconnectedness of social and natural worlds while proposing a critical environmental security framework within which humans and nature are recognized as mutually but unevenly threatened in a shared confrontation with the Anthropocene. Likewise, McDonald (2018) takes issue with anthropocentrism of popular environmental security discourses and suggests that ecosystems themselves— instead of humans, states, or international society-— constitute a more ethical and holistic referent object, arguing

that such a shift can invoke a security lens oriented toward long-term resilience and the protection of all those who are vulnerable to ecological change. In a general sense, attempts to promote alternative discourses of environmental security are rooted in the same assumption that security matters, and as environmental issues are increasingly subject to securitization, it is important for scholars to reflect upon the far-reaching consequences of legitimizing certain political projects under the rubric of environmental security.

This dissertation contributes to debates about environmental security in two key ways. First, while drawing from the critical literature on the practical and theoretical consequences of distinct environmental security discourses, I engage in an interpretive analysis of environmental security discourses as they manifest among state and non-state actors operating transnationally across, within, and beyond traditionally defined state borders. As it currently stands, the literature on environmental security primarily considers intergovernmental organizations, states, or think tanks as securitizing agents, but pays little attention to the proliferation of environmental security across non-state governance arrangements. This is an important, yet underexplored area of both environmental and security politics where non-state actors invested in environmental governance are shaping the concept of environmental security and thus influencing subsequent processes of legitimation. Second, I also investigate contestation surrounding corporate appropriations of environmental security and the extent to which relevant audiences engage in counter-hegemonic articulations of environmental security. Although there are profound and important rearticulations of environmental security within the academic literature, there are fewer explorations into how environmental security is understood or articulated outside of academia and among communities engaging in struggle against prevailing arrangements of power upheld by dominant environmental security discourses. Therefore, I

extend contemporary debates on the construction of environmental security discourses by widening the analytical scope of emphasis to include a broader range of actors as well as the prevalence of counter-hegemonic contestation.

### Global Environmental Governance: Legitimacy in the Transnational Sphere

The cross-border transfer of environmental flows has become increasingly evident in recent decades, and the global dimension of environmental politics especially relevant to broader debates about public life. The notion that multi-scalar processes are fueling the transnational circulation of ideas and products is now a widely accepted principle of sociological study, but scholars of global environmental governance remain particularly attentive to this transgression of traditional boundaries and are committed to understanding how politics operate on such a planetary level. It follows, then, that global environmental governance as a field offers an array of unique analytical categories through which to interpret the contemporary structure of ecological politics and the distinct power relations that permeate this globalized landscape. A significant portion of the literature, for example, examines the distribution of legitimacy within transnational spaces, placing "who, how, and for whom" at the forefront of inquiry into environmental decision-making.

In this section, I review the significance of the transnational sphere as an evolving political space where emerging arrangements of environmental governance influence the landscape of environmental politics. I then detail various perspectives on legitimacy as they are formulated across different areas of global environmental governance research, focusing specifically on how legitimacy relates to perceptions of authority that relate to but extend beyond

the state. In closing, I position this dissertation's main purpose of exploring environmental security discourses within the context of legitimacy and transnational governance.

*Transnational Governance*

Global environmental governance as a field attempts to make sense of the varied and multi-scalar relationships among state and non-state actors, particularly in terms of their formal and informal capacity to regulate environmental problems. There remains considerable debate among academics, however, as to the underlying purpose of such research, which Biermann and Pattberg (2008) classify under three distinct categories: analytical, programmatic, and critical. Analytical research focuses on the sociopolitical transformations associated with new forms of global governance, a programmatic lens views global governance as a political tool for steering globalization in a "better" direction, and a critical approach foregrounds assessments of power dynamics as they shape inequity, justice, and North/South relations (Bierman and Patterberg 2008). This dissertation primarily embraces a critical approach to global environmental governance in that I seek to interpret how transnational actors inform and challenge environmental security discourses along various axes of power. More specifically, I focus on the performative power of environmental security discourses to evaluate how such constructions of human-nature relations shape processes of legitimation among state and non-state actors operating across borders.

This project builds upon the notion that multi-level governance is continuously evolving as actors beyond the state claim authority over global-scale challenges (Hale 2020; Dingwerth 2017; Hale and Held 2011; Vogel 2008; Slaughter 2004; Young 2002; Rosenau 1995), and that these shifts in who or what entities have dominion over the world's most pressing problems have

wide-reaching implications for how society responds (Galaz et al. 2012; Biermann 2014; Ostrom 2009). Thus, my goal is to expand upon current debates about how the landscape of global environmental governance is evolving in the context of the growing predominance and authority of non-state actors and non-traditional governance arrangements that extend beyond territorial boundaries. More precisely, my aim is to shed light on how distinct mechanisms of power and discourse associated with environmental security contribute to the changing architecture of cross-border relations among state actors, NGOs, TNCs, and resistance movements. In doing so, this project contributes to a deeper understanding of how transnational environmental politics are evolving in tandem with increasingly dire socio-ecological changes. Throughout this endeavor, I understand transnational environmental politics as a space wherein the dynamics of legitimacy, accountability, agency, power, and discourse coalesce at a planetary scale that encompasses multiple levels of political activity and challenges the rigidity of territorial borders. My underlying position is that it remains crucial to understand how different actors engaging across planes of transnational environmental politics influence the governance of the world's most pressing problems including globalized resource extraction, conflict, development, and climate change.

Given this dissertation's emphasis on transnational environmental politics, I am primarily interested in understanding the role of transnational actors rather than conventional state governments. However, I maintain that it is important to acknowledge the continued predominance of states and their regulative capacities, especially as the state remains a transformative and impactful force in global environmental governance both in terms of its power to initiate "green" policies, reinforce market-based approaches, and regulate movement of people and resources across borders (Meadowcroft and Steuer 2018; Roger et al. 2017;

Bäckstrand and Kronsell 2015; Eckersley 2004). Consequently, this project views non-state actors as positioned within transnational governance arrangements that are not divorced from but entangled with a broader global landscape that includes states and their influence over environmental flows (Stevis and Bruyninckx 2002). The primary purpose of this dissertation, therefore, is to interpret environmental security discourses as they appear within distinct political spaces that extend across and reconfigure the role and place of state-centric boundaries. Such environmental security discourses are not ontologically detached from a world where statehood permeates political debates and practices, but rather provide a unique articulation of security as an evolving concept within the contemporary context of increasingly globalized and distressed human-nature relations. Thus, my focus on the transnational sphere involves attention toward both state and non-state actors throughout different areas of this dissertation.

An orientation toward the transnational sphere of global politics is especially necessary for understanding the conditions under which present-day governance arrangements take shape and operate in relation to environmental issues. While challenges like climate change and transboundary pollution, for instance, contradict or defy state-centric governance strategies based on the preservation of bordered geographies, they also provoke participation from a wide range of non-state actors including NGOs, transnational corporations (TNCS), epistemic communities, and social justice organizations who seek to take part in and/or steer society's response to such far-reaching and multi-scalar issues (Betsill 2015). Many scholars of global environmental governance who incorporate the proliferation of non-state actors into their theories and empirical research accentuate this distinct sphere of transitional governance as a space where such actors vie for authority over environmental problems, generating new and alternative forms of governance while re-shaping concepts like sovereignty, accountability, and legitimacy

(Andonova and Mitchell 2010; Dellas et al. 2011; Biermann et al. 2010; Bulkeley and Schroder 2011; Bartley 2018; Dauvergne and Lister 2010). This dissertation particularly focuses on the role of, states, IGOs, TNCs, and resistance movements in shaping such new forms of governance and intends to contribute to a deeper understanding of how a wider spectrum of actors claim or contest authority over social and environmental issues that cut across transnational spaces.

Inquiry into the position of TNCs, states, IGOs, NGOs, and social movements in global environmental affairs also raises questions about the broader connections between the world political economy and environmental change. As critical scholars contend, globalized flows of capital and finance, over which such actors seek to exert influence, contribute to the expansion of extractive and deleterious practices that compromise life-supportive processes on which human and non-human lives depend (Christoff and Eckersley 2013:161). Such concerns bring to the fore the centrality of capitalism within global-scale debates about human-nature relations. The current global economy, for instance, depends on the delineation and legitimation of certain ways of interacting with "nature." As Moore (2015, 2) puts it, the governing perception is that "nature" is "external and may be coded, quantified, and rationalized to serve economic growth, social development, or some other higher good." Moore (2015) instead advocates for viewing the world economy as a "world-ecology" to expose the interconnected yet unevenly constructed patchwork of power, history, and nature that constitutes current economic relations. This brings into focus the contested structures of capitalism and the systemic forces that shape who governs ecological relationships and for what purpose (Schnaiberg 1980; Schnaiberg and Gould 1994; Gould et al. 2004). In this project, I attempt to understand how different actors leverage environmental security discourses in transnational spaces that are consequently imbricated in various histories and power dynamics associated with the world political economy. Such a

critical lens brings to bear broader issues concerning North/South relations, post/neo-colonialism, sites of contestation, and environmental inequities.

*Sources of Legitimacy*

As cross-border governance arrangements become more prolific, examining processes of legitimation can facilitate a more nuanced understanding of the allocation of and contestation over authority among state and non-state actors and broader relationships between such authority and societal norms and practices. Focusing on legitimacy, for instance, highlights the role of actors as agents rather than passive participants in the global politics. As Dellas et al. (2011, 87) contend "agents are authoritative actors where authority is understood as the ability to exercise power with legitimacy." In other words, rather than merely measuring the extent to which actors engage in formal policymaking, interrogating the legitimacy of different actors requires broader assessments of power, discourse, and the acquisition of agency. Therefore, this dissertation focuses on legitimation processes as they evolve in conjunction with emerging transnational governance arrangements— where agents can derive legitimacy through a variety claims distinct from state-centric expressions of responsibility and where such claims are recognized or challenged by audiences that extend beyond the traditional electorate.

Keeping pace with discursive constructions of legitimacy is particularly important as these processes take on new shape and form in a globalized society facing unprecedented ecological change. Perspectives on legitimacy have historically referred to philosophies or beliefs about the acquisition of state-centric authority, the normatively appropriate application of governmental administration, or the ability to provide stability in the midst of inter-state conflict (Habermas 1976; Wadeen 1999; Beetham 2013; Eisentraut 2013). Increasingly, however,

scholars of global politics are focusing on the legitimacy of "de-territorialized" governance arrangements as modern challenges like socio-ecological change problematize nationally bound justifications of authority (Bernstein and Cashore 2007; Bernstein 2011; Bäckstrand 2006; Held & McGrew 2008; Scholte 2011, 2018). In this context, non-state actors like TNCs or NGOs can appeal to the evolving societal expectation that they are responsible and should be held accountable for managing problems that are global in scope, such as environmental change. This changing landscape of expectations has significant implications for the architecture of transnational governance, the extent of agency attributed to particular actors, and the ways authoritative actors gain or lose legitimacy (Bulkeley et al. 2014; de la Plaza Estaban et al. 2014; Patterson 2020). Thus, moving beyond strictly normative or state-centric justifications, global governance scholars draw attention to the range of sociological processes that shape the legitimacy of authoritative figures, asking "whether, why, how, and with what consequence they enjoy legitimacy in practice" (Tallberg et al. 2018, 4).

Specific indicators of legitimacy, however, remain contested and those examining new types of authority debate which standards to use when evaluating how non-state actors acquire legitimate status. One particular branch of this scholarship, for instance, focuses on the capacity of non-state actors to fill "governance gaps" left by an inability or unwillingness of states to manage complicated environmental challenges (Hurrell 2005). As Bäckstrand (2006: 291) suggests, the growing prevalence of private actors in implementing, regulating, and monitoring governance activities has "emerged partly as a response to the limits of multilateralism, where intergovernmental diplomacy alone cannot grapple with the pressing problems and complex dimensions of sustainable development." In this respect, non-state actors can earn legitimacy by meeting "input" demands, which include increased procedural justice, inclusivity, and

accountability related to decision-making processes, or "output" demands such as the technical and knowledge-based ability to effectively address challenges over which they claim authority (Backstrand 2006). In pursuing this line of research, Kalfagianni and Pattberg (2014) evaluate the output legitimacy of private, environmental rule-setting organizations on the basis of their ability to generate regulative standards that are then effectively accepted and implemented by relevant corporate actors. Seeking to underscore internal processes related to the "input" dimensions of legitimacy, Marx (2014) details how institutional practices that increase accountability, such as settlement dispute systems, influence the extent to which private eco-certifications schemes acquire legitimate status. Overall, such perspectives view the effective provision of procedural and/or performance-based functions as a primary source of legitimacy for non-state actors engaging in environmental governance.

On the other hand, some scholars focus their efforts on scrutinizing the democratic credentials of transnational actors and engage in more theoretically driven debates concerning the ideal forms of public participation in global governance. At a broad level, this approach grapples with notions of "global democracy," and contemplates whether and how democratic norms derived from state-centric institutions can fit a more dispersed global context (Erman and Uhlin 2018; Bexell 2014; Dryzek 2006). As Agné (2018) contends, foregrounding the concept of legitimacy can facilitate more refined research on the prospect of global democracy by shifting attention away from concepts like the "demos" toward more specific conditions and values under which global democratic practices take place. More specifically, studies on democratic legitimacy aim to bridge the gap between democratic theorizing and empirically examining the democratic credentials of different transnational actors including TNCs, NGOs, social movements, and other civil society organizations (Erman and Uhlin 2018; Dingwerth 2017).

Such credentials, however, are subjective and always molded by the researcher's own normative standpoint. Bexell et al. (2010: 84), for instance, assess the democratic legitimacy of non-state actors while using accountability and participation as key criteria, explicitly at the expense of considering other democratic values such as equality or freedom. Alternatively, Fuchs et al. (2018) include transparency as an important source of democratic legitimacy, whereas Dingwerth (2007) adds inclusiveness, representation, responsiveness, and deliberation to his list of democratic credentials. In sum, standards against which scholars judge the democratic legitimacy of non-state actors are a reflection of broader normative debates about what "rule by the people" should look like in transnational spaces.

Bringing into view wider accounts of the architecture of global governance beyond its democratic potential, certain areas of legitimacy scholarship focus on how structural dynamics shape the varied acquisition of authority among state and non-state actors (Scholte 2018; Bernstein 2011, 2001). Such studies point to broader governing principles that hold sway over what or who particular political communities consider legitimate or illegitimate. Bexell (2014), for example, refers to this general compatibility between rule-making and societal values as "substantive legitimacy," alluding to the processes through which contingent yet contestable sources of authority are derived from agreed upon norms. Some scholars take on a more critical view of structures in their assessments of prevailing social orders, contending that global forces like capitalism, racism, patriarchy, and neo-colonialism significantly shape the allocation of authority among governing actors and their subjects (Worth 2015; Hoffman 2013; Falkner 2007; Cox 1981). Many such studies also grapple with notions of agency and ask whether, how, and to what extent legitimacy is co-constituted across political relationships often characterized by uneven power dynamics (Levy and Newell 2005). At the same time, some structural perspectives

underscore the de-territorialized, multi-scaler spaces within which legitimacy is negotiated and/or contested, suggesting that "different structures 'flow' in irregular transborder fashion across world spaces" (Scholte 2018: 2226). In a notable example of a meta-normative analysis of the structural forces at play within the spheres of environmental governance, Bernstein (2011) details how deeply embedded preferences for economic growth, sovereignty, and stakeholder accountability significantly influence the degree to which relevant publics accept or reject the legitimacy of state and non-state governance arrangements.

Embracing an alternative orientation toward the long-standing structure-agency debate, a growing number of legitimacy analysts focus on the intersubjective relationship between governing institutions and the "audiences" who grant or contest their legitimacy. Audiences arguably play a pivotal role in processes of legitimation given that legitimacy is often understood as a function of authority claims that are then interpreted, favorably or not, by relevant political communities (Gregoratti and Uhlin 2018; Bexell 2014; Bernstein 2011). In the realm of global governance, such relevant communities extend beyond electoral constituencies and include a variation of both state and non-state actors including protest movements, governmental elites, NGOs, IGOs, experts, and civil society organizations (Gregoratti and Uhlin 2018; Bexell and Jönsson 2018; Tallberg and Zürn 2017; Symons, 2011). According to Bexell and Jönsson (2018), audiences of authority claims are either targeted or self-appointed, and can have direct institutional connections to those seeking legitimacy or engage in legitimation debates as outside yet actively involved observers. Whereas some audiences might grant or reinforce the legitimacy of governing actors, such as in the case of communities lending corporations "social licenses to operate" (Mayes 2015), other audiences can attempt to delegitimize specific actors or governing principles, potentially invoking re-legitimation strategies and/or generating new or alternative

legitimacy beliefs (Gregoratti and Uhlin 2018; Steffek 2009; Scholte 2007). From a critical perspective, some scholars employ neo-Gramscian approaches to shed light on the counter-hegemonic challenges audiences can pose by resisting predominate legitimizing ideologies including neoliberal capitalism (Mittelman 2011; Cox 1987). Counter-movements, for instance, can subvert the legitimacy of governing authorities or prevailing ideological structures, and at the same time, promote emancipatory discourses that foster more equitable frameworks for governing social relations (Scholte 2018, 2399; Levy and Newell 2005).Ultimately, exploring the multivalent relationships between those who claim authority over particular issues and the audiences on the receiving end of such claims is essential for understanding the negotiation and contestation of formative political bonds that "lie at the heart of legitimacy" (Bexell and Jönsson 2018, 3100).

While interpreting the global proliferation of environmental security discourses, I draw from the above literature to gain a better sense of how environmental security discourses influence transnational environmental politics. In chapter 4, I analyze the FEW security nexus as a particularly relevant political domain in which the concept of environmental security serves to challenge traditional, state-centric notions of who as agency to govern new types of security challenges posed by contemporary planetary conditions. Then, in chapter 5, I investigate the ways TNCs draw from distinct concepts of environmental security present within discussions of the FEW security nexus to claim legitimacy over the governance of cross-border risks. I situate these TNC legitimacy claims within the four key perspectives concerning processes of legitimation as previously outlined— governance gaps, democratic practices, structural forces, and audience relations. In doing so, I shed light on how environmental security discourses can influence the way actors beyond the state vie for authority over globalized socio-ecological

landscapes. Lastly, in chapter 6, I bring to the fore how subjects-in-resistance employ counter perspectives of environmental security to challenge the authority claims of TNCs and to subvert the notion that non-state actors like TNCs can effectively manage environmental risks better than "a shrinking state."

**Critical Security Studies: An Overview**

In an effort to thoroughly examine how environmental security traverses and shapes transnational environmental politics, this dissertation also engages with key debates and insights from critical security studies that speak to the linkages among security (and securitization), authority, power, and discourse. Critical security studies is a burgeoning area of scholarship that views security as a fundamentally contested and powerful idea, one that defies definition and is implicated in wider and deeper political relationships than are usually considered in "traditional" security studies. Contrary to realist positions that underlie traditional security studies, critical security studies attempt to decenter causal inferences of impending inter-state warfare, militaristic competition, and state survival in an anarchic world system. Instead, the critical appendage to security studies indicates the field's intent to politicize the meaning of security, revealing its underlying assumptions as they manifest across different contexts, deconstruct the knowledge regimes that enable certain configurations of security, and locate liberatory possibilities within the contradictions of such political formations (Krause and Williams 2015).

In this section, I review the literature on critical security studies by outlining common themes in the field and while also highlighting key debates regarding different analytical strategies and the broader purpose of critical research on security. My goal is to draw upon the following literature to formulate a conceptual synthesis that combines insights from critical

security studies and global environmental governance. This conceptual synthesis will then serve as a guide for interpreting the conditions under which environmental security is negotiated and contested among different actors in the transnational sphere of the FEW security nexus.

Analyzing environmental security as a matter of global environmental governance, and specifically as a source of legitimacy among corporate actors, requires examining the power dynamics and knowledge regimes that give meaning and consequence to environmental security discourses. Therefore, in this section I reach beyond the critical literature on environmental security to review the broader landscape of critical security studies. As a multivalent field, critical security studies prioritizes questions about power while investigating the differentiated impact of security politics across distinct social contexts. In this regard, critical security studies provides a unique set of theoretical and conceptual perspectives for understanding how and with what effect environmental security discourses permeate transnational political spaces. In recognition of the incisive insights critical security studies can offer to interpretations of environmental security and security more generally, I argue that my analysis of environmental security as a source of legitimacy in global environmental governance must necessarily engage with key themes from the field of critical security studies, which I review here.

Borrowing from a range of perspectives, critical security studies draws upon various veins of critical theory including Marxism (and the Frankfort School), feminism, poststructuralism, and post-colonial studies to investigate the social dynamics surrounding politics of security. Despite uniting around common concerns about pervasive power relations embedded in security discourses and practices, scholars approach critical security studies from various standpoints and internally debate the objectives and analytical strategies that should characterize such research. One way to categorize different approaches within the field is to

differentiate between the three most well-known "schools" of thought: the Copenhagen School, the Welsh School, and the Paris School (Wæver 2004).

First, the Copenhagen School primarily focuses on invocations of security as a means to justify extraordinary decision-making authority. From an analytical standpoint, Copenhagen scholars suggest that securitizing agents can frame anything as a security issue by describing it as an existential threat, thus asserting the need for extraordinary measures to contain or manage the issue (Buzan et al. 1998). In other words, securitization is "the move that takes politics beyond the established rules of the game and frames the issue either as a special kind of politics or as above politics," while relying on little, if any, democratic deliberation (Buzan et al. 1998: 23). Given the tendency for security to evoke notions of urgency and survival, naming a problem as a security issue arguably places that issue within a political realm uniquely positioned beyond the logics of "normal" politics that generally pertain to less urgent issues. De-securitization, therefore, is one way to regain authority over problems that have been subsumed by such emergency rhetoric. Although securitization theory can be applied in a variety of ways, most analyses include an in-depth assessment of the securitizing actors, referent objects, and the audiences to whom securitizing actors are speaking (Buzan et al., 1998).

Advancing a more explicitly normative orientation toward security, the Welsh School searches for emancipatory potential in alternative meanings and approaches to security centered around human welfare rather than military warfare. Scholars associated with the Welsh school question the role of the state in providing security, arguing the state apparatus often perpetuates conditions of insecurity and oppression instead of alleviating threats like poverty or environmental degradation (Booth 2007). Thus, rather than relying on traditional conceptions of security formulated on the basis of great power competition, scholars like Ken Booth and

Richard Wyn Jones, who have come to represent the core ideas of the Welsh School, attempt to re-direct the purpose of security studies toward emancipatory aims. Drawing from the Marxist tradition of Critical Theory, Booth and Wyn Jones emphasize the corporeal and material determinants of human well-being as primary matters of security. In terms of praxis, they argue that critical security scholars should support social movements that seek to dismantle structural constraints preventing people from enjoying a genuine sense of security—a security that extends beyond mere survival and instead allows for practices of resistance, an abundance of freewill, and the continuous, reciprocal becoming of humanity (Booth 2007; Wyn Jones 1999).

Lastly, the Paris School attempts to deconstruct the routinized or normalized politics of security, which are entangled with broader forces of governmentality (Bigo 2017, 2016, 2008). This requires a sociological perspective rather the normative approach of the Welsh School or the analytical approach of Copenhagen School. Specifically, Paris scholars interrogate the operation and functionality of diffuse practices of security that take place under seemingly normal social conditions, such as policing, or border control (Bigo 2016; Huysmans 2006). This branch of critical security studies is in many ways informed by poststructural thought regarding the construction of knowledge surrounding security meta-narratives, the language used to describe risks and threats, and the associated production of racialized or gendered subjectivities (Peoples and Vaughan-Williams 2021; Neocleous 2008). With this approach, rather than analyzing the linear invocation of emergency measures through specific speech acts, the Paris school complicates and contextualizes the relationships between security discourses and their relevant "audiences" by emphasizing the performative contingent networks of security practices that stretch across increasingly globalized topographies (Bigo 2016).

While these three schools each offer unique theoretical approaches to security, they are not mutually exclusive, and many scholars produce work that either overlaps with multiple aspects of each or extends beyond the boundaries of this three-part classification scheme. Feminist perspectives, for example, illustrate the ways through which gender dynamics influence the construction of emergency measures relating to conflict, the discursive articulation of threats and risks, and the contingent sources of human insecurity (Hansen 2000). As Sjoberg (2013, 28) succinctly puts it, "genderings saturate every level of global politics" and one example of this is the way "gender constitutes and is constituted by war," meaning that the material instances of violent competition as well as the ideas, values, and discourses that shape conflict are imbued with gendered meaning. Moreover, feminist perspectives engage with "non-traditional" security issues such as environmental degradation and contribute to the broadening of security studies to include reflections on multi-varied and unevenly distributed threats that result from structural inequities (Detraz 2012, 2009). While working against the Western centrism of critical security studies, others employ postcolonial or decolonial thought to bring to the fore legacies of imperial conquest, and in the process, interrogate practices and discourses of security that perpetuate harmful depictions of the "other," such as those associated with the war on terror or the proliferation of nuclear weapons (Gusterson 2004; Barkawi and Laffey 2006). Some also take critical security studies to task on a more foundational level, arguing that more often than not, theories of securitization remain tied to universalizing frameworks that project a Eurocentric worldview onto the social structures and relationships in question—which necessitates a deeper reflection of the over-arching project of critical security studies moving forward (Howell and Richter-Montpetit 2019; Bertrand 2018).

In other realms, scholars extend the parameters of critical security studies to include more detailed analyses of spaces of struggle and resistance and how they might (or might not) relate to the politics of security. Certainly, many of the previously mentioned approaches to critical security studies consider struggle and resistance in various ways, most notably through emancipatory, feminist, or postcolonial frameworks. Yet, other scholars who are particularly dubious of universalizing notions of emancipation or ethically determined logics of security call for a more critical engagement with the wider ordering principles of power (Montesinos Coleman and Rosenow 2016; Tulumello 2020). In taking up struggle as an entry point, scholars can avoid fixed or universal assumptions about security practices and instead "analyze security in all its entanglements with political economic logics" while paying closer attention to how "struggles reveal fractured and contingent assemblages of power and violence in all their heterogeneity" (Coleman and Rosenow 2016, 7, 14). In doing so, critical security studies would not only abstain from unintentionally reifying security logics based on systems of inclusion and exclusion, but can more precisely engage with contemporary resistance against such oppressive security regimes by exploring subversive possibilities across sites of struggle. To name one example, in the case of human trafficking as a securitized migration issue, Aradau (2008) illustrates how focusing on the common struggles of women involved in trafficking (rather than emphasizing their at-risk victimhood) exposes pathways for political mobilization based upon their shared commonalty as workers, subverting the categorization and subsequent derogation of such women as "illegal" prostitutes.

Overall, critical security studies offers a wide range of concepts, theories, and empirical insights that speak to the varied power relations shaping contemporary security practices. Yet, one area left significantly underexplored is the distinct, transnational role of non-state actors in

molding and utilizing security discourses across borders. This relates to my aim of better understanding new assemblages of security practices that are characterized by transnational politics and cross-border flows of ideas, nature, and capital. While some scholars address the entanglement of security discourses with contemporary features of globalization, the primary focus of such research remains largely concerned with state-sanctioned military or paramilitary configurations. For example, Bigo (2012) shows how globalized security discourses concerning terrorism, migration, and human trafficking perpetuate conditions of insecurity by defining transnational “threats” and then meeting such threats with globalized networks of public and private security “experts” including police officers, border guards, and other intelligence officials– whose emergency politics and oppressive technologies are legitimized by globalized perceptions of mobility as dangerous.

This project, on the other hand, takes on a transnational perspective to account for the wider assemblage of actors beyond specialized security agents— including large-scale TNCs, IGOs, NGOs, and counter-movements— who are engaging with security, and specifically environmental security, as a contested concept. With this approach, I seek to understand how transnational security discourses are leveraged or challenged in processes of governance that are also implicated in the broader political and economic contours of environmental politics. In accomplishing this task, I engage with a range of perspectives related to the three mains schools of critical security studies in addition to their critiques. Chapter 4, for instance, embraces insights from the analytical Copenhagen School of thought and simultaneously explores the use of security language in a non-emergency but bureaucratized setting similar to those described in the Paris school. Chapter 5 employs a similar approach while expanding upon the Paris school’s preoccupation with globalization to include a more in-depth look at the role of non-state actors

such as TNCs. Then, chapter 6 builds upon the Welsh school's emancipatory orientation to interpret the meaning of environmental security within the context of resistance, and also extends traditional securitization approaches to include counter perspectives. Overall, I merge insights on power from critical security studies with an understanding of the various processes that inform authority and legitimacy from global environmental governance to dig deeper into various sticking points that I describe in the following section, all of which, I argue, shape how security operates within the transnational environmental sphere.

**Conceptual Tensions and Questions**

Here, I draw from the literatures dealing with environmental security, critical security studies, and global environmental governance to assemble a conceptual point of reference for analyzing how environmental security functions as a powerful discursive concept among different state and non-state actors operating across the FEW security nexus. My central objective here is to integrate interesting conversations and tensions that emerge when considering both global environmental governance and critical security concepts in tandem, specifically as they relate to four key aspects of legitimacy covered earlier in this chapter: governance gaps, democratic principles, structural forces, and audiences. In doing so, I embrace an interpretive orientation such that this synthesis offers a starting point, rather than a rigid classification scheme, from which to begin assessing the influence of transnational, environmental security discourses. This section proceeds in four sections that, in combination, present particular areas of tension that arise when bringing critical security studies and global environmental governance together to understand the relationships across legitimacy, power, authority, and environmental security.

*Governance Gaps*

While some global environmental governance scholars examine questions of legitimacy in relation to the extent to which non-state actors are filling "governance gaps," (Bartley 2007; Bäckstrand 2006) others who focus on security see the state as overbearing, rather than in a position of retreat (Buzan 1991; Booth 2007). This poses a unique tension in terms of how non-state actors might acquire legitimacy through security discourses. In one respect, states could indeed lack the wherewithal to sufficiently grapple with environmental security issues given the contradiction between environmental flows and bordering, opening up possibilities for non-state actors to position themselves as "output" security providers in the face of this void. Or, alternatively, states might willingly take part in outsourcing particular security issues such as environmental change in an effort to absolve themselves of responsibility, thus delegating greater authority to non-state actors to manage material ecologies while at the same time refining the political and ideological architecture of neoliberal capitalism (Mayer and Phillips 2017). Most branches of critical security studies, however, view the state as an exceedingly domineering and oppressive force wherein its elite representatives either utilize processes of securitization to gain more control over national or global issues or perpetuate conditions of insecurity through normalized systems governmentality, colonialism, and economic deprivation (Wyn Jones 1999; Booth 2007; Barkawi and Laffey 2006). Thus, some of the main prerogatives of critical security studies are to deconstruct the state-centrism of security discourses, de-securitize non-military issues, and/or propose alternative notes of security that avoid the state-sanctioned exceptionalism of emergency politics.

These conversations raise important questions concerning the relationships between non-state actors who are shaping environmental security discourses and the lingering or active influence of state-centric logic within such constructions of security. Specifically, as TNCs or NGOs invoke the language of threat, danger, and risk-management in relation to environmental governance, to what extent are they filling a void, failing in line with state-led designs of global authority, appropriating traditionally state-centric logics of security as means of legitimating their authority in the transnational sphere, or all-together reshaping security and its legitimating potential as a matter of non-state governance? The answers to these questions speak more broadly  the political economic order of environmental politics in which privatization continues to escalate as a fundamental governing technique, which bears important consequences for the historically and socially contingent relationships among civil society, the state, and transnational corporate actors.

*Democratic principles*

A central concern for many critical security scholars is the tendency for securitization to preclude democratic deliberation, as security issues are often governed within elite and exclusive domains of decision-making (Buzan et al. 1998). Yet, much of the literature about non-state environmental actors highlights enhanced democratic participation as an essential source of legitimacy (Erman and Uhlin 2018; Bexell 2014; Dryzek 2006). Thus, introducing environmental security as crucial facet of the politics of legitimation among transnational governance arrangements complicates the preoccupation with democratic credentials, and illuminates a tension between inclusive participation as a mainstay of environmental governance

and the increasingly risk-based rhetoric leveraged among non-state actors, particularly TNCs in this case.

While many security scholars, most prominently those associated with the Copenhagen School, warn that securitization stymies democratic deliberation in most if not all instances, others grapple with the relationship between inclusivity and security by advocating for alternative conceptions of security that might foster a more equitable and inclusive politics (Booth 2007). In assessing the role of environmental security discourse in relation to democratic legitimacy, one can also consider the possibility for certain conceptions of environmental security to broaden the scope of democratic participation, especially if such articulations of security are intentionally politicized rather than invoked to garner exceptional authority (Nunes 2016). Moreover, Booth (2007, 8) contemplates how emancipatory versions of security can influence politics on a worldly scale by facilitating "a universal human community, committed to egalitarian principles." This necessitates further consideration of how security is related to the project of global democracy in either constraining or liberating ways, and whether conceptions of environmental security as leveraged by different actors incorporate democratic ideals or rather circumvent such democratic prospects while relying on emergency rhetoric as an alternative source of legitimacy.

*Structural forces*

Global environmental governance and critical security studies both deal with structural forces and have generated a wide range of insights regarding the impact of meta-normative structures on difference scales of social relations. This presents a particularly rich opportunity to synthesize such scholarly work to better understand how environmental security fits into the

broader landscape of global politics. For example, just as security scholars point to the connections between security discourses and the legitimation of status quo configurations of neoliberalism, so too do governance scholars highlight how neoliberal norms influence the proliferation and acceptance of market-oriented approaches to environmental challenges (Bernstein 2011; Bartley 2007; Neocleous 2008). In the security realm, some embrace the Anthropocene as the defining feature of global politics and attempt to reorient security perspectives toward the complexities of large-scale socio-ecological change (Hardt 2018). Similarly, global environmental governance scholars are increasingly expanding their scope to include an enmeshed planetary perspective that defies traditional categories of international relations (Burke et al. 2016). Both fields also examine how structural forces impact politics of inclusion and exclusion, interrogating issues from North/South discrepancies in representation across governance arrangements to the construction of knowledge formations that are rooted in articulations of the "other" as dangerous (Bigo 2008; Bierman and Patterberg 2008).

It can be argued, however, that critical security studies more consistently highlights the role of power in shaping the hierarchies of structural dynamics, most overtly through perspectives like poststructuralism, feminism, and post-colonialism (Aradau et al. 2015; Sjoberg 2020; Barkawi and Laffey 2006). Therefore, in assessing the conditions under which environmental security is entangled with politics of legitimation at a structural level, there is much still to gain from incorporating distinct concepts that are central to critical security studies—such as biopolitics and governmentality— that not only relate to the function of security discourses in particular, but to the broader features of global politics in which security discourse are situated.

*Audience*

As is evident across politics of legitimation and the construction of security discourses, audiences play a pivotal role in accepting, negotiating, or contesting the legitimacy of governance frameworks or broader social structures to which they are subject. Yet, as Bexell (2014, 297) argues, scholars should seek to "gain deeper understanding of how audiences are constituted through processes of legitimation and how legitimacy claims evolve over time in order to appeal to audiences other than international organizations' member state elites." In many ways, the Copenhagen School attempts to address such concerns, dealing explicitly with the role of audiences in the fact that securitizing actors must appeal to particular groups of people— including state elites, large corporate actors, or smaller communities— who then accept the actuality of an external threat and thus welcome or tolerate emergency measures (Buzan et al. 1998). This perspective, however, severely marginalizes subaltern voices by perpetuating the distinction between white, Western actors who generally "speak" security and "others" who are on the receiving end of such speech acts. Moreover, some scholars point to the immediate, corporeal impacts of security discourses, which are often obscured by theories of securitization that center linguistic processes at the expense of analyzing material forces (Aradau 2018).

Still, others within critical security studies offer a more complex and comprehensive view of "audiences," as agential actors engaging with security politics from various perspectives and standpoints. For instance, Côte (2016, 543) advocates for the "reimagination of the securitization audience as an active agent within an in iterative and contextually situated securitization process, capable of having an independent effect on securitization outcomes". Additionally, in comparison to concepts relating to "de-legitimation, McDonald (2013, 48) points to the importance of exploring alternative security discourses as "subjugated knowledges,"

which are marginalized by hegemonic forces but have the potential to engender forms of resistance to dominant articulations of security. In this sense, taking up struggle as an entry point can offer a wider view such counter narratives and further contextualize the role of "audiences" as actively involved in confronting multi-varied assemblages of security and power (Montesinos Coleman and Rosenow 2016). Thus, understanding "audiences" as located across sites of struggle is a particularly important piece of this dissertation.

**Conclusion**

Moving forward, this dissertation relies on the above synthesis of literatures to analyze processes of securitization across the FEW security nexus. In contributing to insights on environmental security, for instance, I explore the distinct ways environment-security connections are conceptualized by NGOs, governments, and IGOs involved in designing FEW security nexus policy agendas. In this context, I shed light on a particular instance of the expansion of traditional, state-centric security to include cross-border, environmental concerns (Deligianis 2012; Dalby 2009; Trombetta 2008; Barnett and Adger 2001), and show how environmental security narratives safeguard productivity and position private sector actors as primary agents of change and protection. Moreover, I emphasize how the securitization of environmental issues takes on different form and character among sites of struggle in which social movements articulate threats, insecurities, and responses in different ways. Importantly, this project engages with an understanding of environmental security as a political issue related to risk and safety and also as a context-dependent discourse that contains implicit and performative implications for the architecture of global environmental governance and the structure of human-nature relations more broadly.

In terms of the previously outlined synthesis of global environmental governance and critical security studies, this dissertation makes several key contributions. First, Chapters 4, 5, and 6 each engage with the issue of governance gaps in various ways. Chapter 4, for example, contemplates the theoretical and practical function of environmental-security connections within the FEW security nexus while particularly emphasizing how such discourses inform which actors are deemed capable of governing associated security risks, for whom, and how. My findings in Chapter 4 point toward trends in non-traditional and non-state forms of agency that accompany non-traditional notions of security. Chapter 5, then, further engages with questions related to outsourcing and output legitimacy to investigate whether and how TNCs rely on environmental security narratives to claim legitimacy as global governors of transnational environmental politics. Finally, Chapter 6 deals with resistance within the context of a "shrinking state," and argues that social movements can leverage environmental security narratives to hold governments accountable for providing necessary access to essential resources to help civil society respond to increasingly precarious planetary conditions.

Chapters 5 and 6 most squarely engage with questions and tensions surrounding democratic norms and principles. Chapter 5 expands upon the literature on democratic sources of legitimacy in that I reveal how TNCs leverage environmental security narratives while complicating traditional relationships among democratically elected leaders, citizens, and the foundations of political authority (such as security) by connecting security to transnational conceptions of public participation and accountably. This finding refutes the idea that security discourses primarily enhance the domineering capacities of state governments in moments of crisis (Buzan et al. 1998) and instead highlights how non-state actors can embed environment-security connections within their efforts to gain legitimacy through enhancing democratic forms

of governance. On the other hand, Chapter 6 reveals how the Our Water Our Right movement turns toward securitization pressure state governments to both embrace a “state of emergency” mentality and enhance community engagement and democratic participation in their water management processes. Thus, this analysis draws from and complicates the tension surrounding securitization, power, and authority by providing an example in which a return to public authority results from a securitization process tied to resistance, struggle, and collective action.

The question of structural forces is also present across each chapter and thus serves as an important thread across this project. In Chapters 3 and 4, I reflect on the ways in which environment-security connections found within FEW nexus reinforce the normalization of instrumentalizing nature through quantitative, market-oriented, and technocratic tools of global governance. In chapter 5, I elaborate on how TNCs draw upon Western-centric notions of progress and development as a structural, discursive justification for their interventions in environmental security politics of the global South. Then, Chapter 6 explores how environmental security narratives tied to resistance can involve critiques of structures of power associated with status quo configurations of neoliberalism.

Lastly, the literature on audiences and the intersubjective relationships that constitute authority and legitimacy in the transnational sphere shapes my analysis of corporate discourses and deeply informs my understanding of securitization among counter-movements. In Chapter 5, I identify the target audience of TNC legitimacy claims over environmental security as primarily English-speaking, Western elites concerned with the status of socially and environmentally responsible investments. Moreover, I find that TNCs delegitimize more critical, “self-appointed” audiences through tactics such as criminalization and surveillance. Chapter 6, on the other hand, serves as a more thorough engagement with the question of audience. In this chapter, I try to

extend current research on securitization and environmental security more broadly to include a more complicated and detailed analyzes of counter-claims among audiences on the receiving end of “top-down” security discourses.  Thus, in chapter 6 I provide an alternative, counter-hegemonic perspective of governance gaps, democratic principles, and structure from a “self-appointed” and critical audience of securitization processes within the FEW nexus.

# CHAPTER 3. THE FOOD, ENERGY, WATER SECURITY NEXUS

The FEW security nexus serves as a particularly relevant political space in which the concepts outlined above— including legitimacy, security, and power— are in tension with one another as state and non-state actors negotiate and vie for authority over governance agendas concerning the equitable and sustainable management of food, energy, and water resources across borders. More generally, the FEW security nexus constitutes an increasingly prevalent development framework through which sustainability scientists, development practitioners, intergovernmental organizations, governments, universities, and various other actors work toward greater coordination across sectors and disciplines to achieve more effective and coherent environmental solutions.

This dissertation explores the FEW security nexus as an emerging political discourse that influences who governs environmental problems, for whom, and how, thus shaping the contours of global environmental politics. While there exists a dominant FEW nexus discourse shaped by elite actors with a pervasive hold over associated development agendas, the FEW nexus space is comprised of mutually-constituted interactions among a host of actors claiming a stake in the governance of food, energy, and water systems. Thus, this dissertation focuses on both the *politics of contestation* within the FEW nexus, their implications, as well as their discursive formations. More specifically, this project focuses on how the FEW security nexus development paradigm relies on securitized conceptions of environmental problems, which result in particular processes of legitimation, struggle, and contestation. In doing so, I posit that the FEW security nexus represents a particularly relevant political domain through which to understand how environmental security operates as a distinctly power-laden concept that carries practical

implications for the governance of risks and vulnerabilities across borders. Moreover, the FEW security nexus constitutes a space wherein various actors vie for authority over governing such issues, and thus prompts important questions about the role of both state and non-state actors in defining and responding to environmental security challenges. As the FEW security nexus continues to grow as an increasingly favored global development paradigm, this chapter proposes approaching the FEW security perspective as an innately political discourse that relies on assumptions and crucial debates about agency, authority, power, and legitimacy.

In the following section I detail how the FEW security nexus emerged as a distinct approach to governing environmental flows and their interconnectedness. I then review common analytic strategies through which scholars and practitioners employ FEW security nexus thinking, while delineating similarities and differences across mainstream and critical perspectives. Lastly, I propose a unique systems-thinking perspective that I argue can help expand insight into how power relations shape the governance of FEW challenges, particularly those that are subject to securitization.

**Emergence of the FEW Security Nexus**

The development of initiatives directed towards managing natural resources through collaborative policy interventions can be traced to the Integrated Water Resource Management (IWRM) approach, which calls for strengthening cross-sector management of water issues and collaborative governance across agencies. As Srivastava and Mehta (2014) suggest, IWRM was followed by a discursive shift towards water security and then ultimately a shift towards the FEW security nexus perspective.[1] While water issues remain a critical impetus for integrated

[1] The FEW security nexus is also sometimes referred to as the WEF security nexus

thinking, the FEW security nexus discourse highlights the need to make connections across food, energy, and water to optimize efficiency gains by locating synergies and trade-offs across interdependent sectors. The FEW security nexus approach has taken on a particularly prominent role in promoting the Green Economy framework as a guiding principle for maintaining economic growth despite wide-spread resource scarcities. Other scholars promote environmental justice concepts alongside the nexus framework, challenging the notion of green economic growth and bringing to the fore critical issues of access and allocation such as food sovereignty, the right to water, and energy for all (Middleton, Gyawali, and Allen 2015). Such justice-oriented perspectives are an increasingly prominent concern but still take place at the margins of the broader FEW security nexus discourse. I will speak more to the difference between such critical approaches and mainstream approaches in sections that follow.

The core tenets of the FEW security nexus as a cohesive approach to sustainable development were established in 2011 during a conference in Bonn, Germany titled 'The Water, Energy and Food Security Nexus – Solutions for the Green Economy.' This conference, held by the German government in cooperation with the International Food Policy Research Institute (IFPRI), the World Economic Forum (WEF), and the World Wide Fund for Nature (WWF), followed the 2008 World Economic Forum's call to explore the water nexus and was intended by the German government to elaborate key development strategies proposed during their 2001 Bonn International Conference on Freshwater (Srivastava and Mehta, 2014). The Bonn2011 conference was also meant to produce a set of policy recommendations that could inform the sustainable development negotiations during the Rio+20 UN Conference on Climate Change (Leese and Meisch 2015).

Aligning with the Green Economy framework, the policy recommendations produced at Bonn 2011 include (1) optimizing resource allocation by encouraging an integrative approach to the management of water, energy, and food sectors; (2) ensuring access to natural resources while also increasing productivity and efficiency by monetizing ecosystem services; and (3) facilitating economic growth and poverty eradication through innovative sustainable development techniques that utilize technological advancements and policy coherence across sectors. Since 2011, these core ideas have been integrated into multiple governance realms and analyzed by various academic scholars (Bazilian et al. 2011; Hoff 2011; Bogardi et al. 2012; Bizikova et al. 2013; Leese and Meisch 2015; Rasul and Sharma 2016). International institutions that have adopted elements of the FEW security nexus discourse include the Food and Agricultural Organization (FAO), the World Economic Forum (WEF), and the International Renewable Energy Agency (IRENA). In January 2015, IRENA published a widely cited report titled 'Renewable Energy in the Water-Energy-Food Nexus', which was followed by a publication demonstrating Germany's leadership in transitioning to renewable energy (IRENA 2015b). In sum, 2011 serves as a benchmark year in which the FEW security nexus was solidified as an important part of global governance and was subsequently disseminated into global institutions, like IRENA, that are consistent with Green Economic transitions as exemplified in the German development context.

**FEW Security Nexus Approaches**

While the FEW security nexus proliferates as an increasingly prevelant approach to sustainable development, distinct perspectives conceptualizing the interconnectedness of FEW systems are emerging across different disciplines, sectors, and actors. This range of approaches

includes socio-technical analyses of the interdependences across FEW infrastructures, scarcity-centered economic perspectives, human-oriented livelihood frameworks, and lastly, more critical appraisals of the power relations that impact inequities across FEW nexus governance systems. In this section, I provide a broad overview of these different analytical lenses, after which I propose a unique systems approach that emphasizes the need to better understand how securitization operates across governments, non-state actors, and counter-movements involved in FEW security nexus politics.

*Mainstream Perspectives*

Many of the dominant analytical categories that provide practical and theoretical meaning to the FEW nexus paradigm remain rooted in socio-technical perspectives that privilege economic indicators of efficiency, demand-supply calculations, and managerial coherence. According to my review of the literature, these mainstream approaches emerge within three different contexts: modifications to the previously established integrative frameworks including IWRM, neo-Malthusian assessments of scarcity, and development proposals for "most vulnerable" communities.

As mentioned previously, efforts to highlight the ecological connections underpinning resource flows is not new, but rather a product of long-standing conversations about how to best integrate ecosystem sciences into environmental governance arrangements. Thus, scholars and practitioners frequently discuss the FEW nexus approach as a way to enhance or modify already exiting frameworks such as IWRM or sustainable development. Cai et al. (2018), for example, argue that the water community is particularly well-suited to contribute to FEW nexus analyses given their expertise in IWRM strategizing— through which scholars, practitioners, and

stakeholders embrace interdisciplinary efforts to promote integrated development of socio-environmental systems alongside which waters flow. In this context, the FEW nexus approach can provide a "clearer scope of integration since it explicitly sets the sectoral bounds (i.e., food, energy, and water resources) of integration" (Cai et al. 2018, 260). Other scholars echo this claim suggesting that the FEW nexus can push interdisciplinary collaboration forward where "IWRM has fallen short" (Cai et al. 2018, 259) are argue that IWRM provides a broad framework within which actors can tackle FEW nexus issues in a coherent manner across different basins and levels of governance, particularly in regards to climate adaptation (Lawford et al. 2013) or with respect to enhancing integrative solutions for food, energy, water security in developing countries (Muller 2015). Moreover, scholars often extoll FEW nexus thinking as a necessary cross-sectoral approach for achieving the 2030 Sustainable Development Goals, which include the provision of food, energy, and water for all (Lui et al. 2018). Overall, a common theme found across such studies is that the FEW nexus framework adds value to integrated thinking ultimately through collaborative, elite-driven investigations that better operationalize scientific tools like quantitative modelling techniques to more accurately capture synergies across sectors, thus locating policy-technical opportunities for enhancing efficiency without compromising economic growth. Such integrated thinking, for example, might result in industrial agricultural companies working to install water saving technologies, the coordination of biofuel production on abandoned agricultural land to maximize efficiency, or the treatment of oil and gas wastewater through constructed wetlands to be re-used for other productive purposes (Hoff 2011).

Much of the justification for strengthening cooperative efforts to enhance efficiency in the FEW nexus literature revolves around a preoccupation with neo-Malthusian concerns about scarcity and population growth. Across the literature, population growth, scarcity, and

competition constitute the prevailing meta-normative context in which various elite actors are beckoned to steer cost-effective solutions that can increase agriculture productivity despite limited energy and water inputs, ensure that water withdrawals remain feasible for energy production, and regulate water distribution and transfers to prevent undesirable regional instabilities (D'Ordorico et al 2018; Godfray et al. 2010). Underlying these urgent calls for increased coordination is the latent and explicit positioning of population growth and scarcity as key "drivers" of limited access to essential resources, which obscures the political and economic mechanism through which access is governed and distributed unequally. Moreover, the urgency surrounding these issues is ostensibly enhanced within the context of climate change. Therefore, organizations like Conservation International embrace the FEW nexus perspective because "ensuring energy, water and food security for an ever-growing population, and in the face of climate change, is fast becoming a critical risk issue for business" (Gerholdt and Pandya 2014). In this context, meeting demand in the face of scarcity justifies the inclusion of private actors in shaping responses to supply-oriented risks and vulnerabilities, and thus raises important questions about the role of business in governing FEW security challenges.

Lastly, the FEW nexus framework is growing as a popular approach largely because it is not only emerging as an academic methodology but also as a widespread global development paradigm. As such, claims about the efficacy of a FEW security nexus include the notion that this particular systems perspective is essential for improving livelihoods, lifting millions of people out of poverty, and enhancing the trajectory of economic growth in developing countries. For example, Rasul and Sharma (2016, 685-689 ) contend that the FEW security nexus is an important policy concept for the reduction of "poverty and other non-climactic stressors that make people vulnerable," the "promotion of minority rights," and the "challenging of

discriminatory behavior," and their research focuses on applying such FEW nexus tenets to better manage "population growth, economic progress, urbanization, and industrialization" of South Asia's Hindu Kush Himalayan region. Grady et al. (2019) also argue that environmental engineering and interdisciplinary perspectives underlying the FEW nexus are key for "drawing attention to considerations of racial and ethnic inequalities, human health, and multiscale governance" on a global scale (761). This emphasis on human well-being and the vulnerability of the poor largely stems from early iterations of the FEW security nexus development paradigm that were crucially shaped by the Bonn 2011 conference, during which primarily Western IGOs and governmental representatives generated policy prescriptions for those whose livelihoods are most at risk amid increasing competition over scarce FEW resources (Hoff 2011). However, as the next section elucidates, many social science scholars have criticized these narratives for homogenizing experiences of "the most vulnerable" to justify the expansion of markets and modern structural adjustment policies targeting the environment, as commodification and privatization are often heralded as crucial and necessary responses in such contexts (see Borgomeo et al. 2018).

*Critical Perspectives*

While the above FEW narratives have pushed for increased reflection of eco-systemic linkages across different sectors and levels of governance, they remain tethered to normalized assumptions about the benefits of commodification, enhanced technological innovation, and elite-drive structural adjustment. in the meantime, the FEW security nexus has garnered significant attention from both advocates and critics and, in the last decade, has become a consistent source of debate among academics and practitioners. A review of the literature reveals

that key concerns regarding the efficacy of the FEW security nexus framework revolve around three main issues: participatory and procedural justice, global power dynamics, and the consequences of securitization.

In terms of access to decision-making spaces, some scholars seek to challenge the inequities pervading the governance of food, energy, and water resources and highlight the importance of adding a justice-oriented perspective to the FEW security nexus development paradigm. Yuan and Lo (2022), for example, note that engineers and other scientists designing FEW nexus agendas often leave behind the question of power. Instead, they argue that empowerment, equitability, and participation should lie at the forefront of nexus governance arrangements. This would then allow collaborators to "plan flexible, adaptable, and functional projects" with "teams with varying backgrounds and experiences" (Yuan and Lo 2022, 937). Such bottom-up perspectives that prioritize participatory, cross-sectoral policy integration where local actors gain greater agency over their development are gaining more attention (Bhattacharyya et al. 2015). Implicit in these initiatives is the idea that procedural justice in decision-making spaces can lend democratic legitimacy to FEW nexus agendas and also mitigate the unequal distribution of environmental risks.

Other scholars take the FEW nexus paradigm to task on a wider, structural level. In this context, the neoliberal framing of the FEW nexus development agenda is said to uphold global power dynamics rooted in histories of colonialism and ecologically unequal exchange, which drive the uneven exposure to and distribution of risk across FEW systems (Roberts and Parks 2009). Scholars like Allouche et al. (2015;2019) confirm the need for FEW nexus thinking, but at the same time, recognize that power and politics shape the market-centric solutions that often permeate such thinking— which they contend obscure the systemic and political sources of

“manufactured” issues like resource scarcity. In response to mainstream FEW nexus narratives, Allouche et al. (2015) call for an alternative approach that grapples with issues of social and environmental justice by tackling politics of difference, knowledge, and political economy. Rather than simplistic models of scarcity and availability, this approach views “inequalities of access as the root of resource crises” (Allouche et al 2015, 616). Like arguments are echoed by various other scholars working to “politicize” the FEW nexus discourse. As Foran (2015, 65) puts it, the FEW nexus initiatives involve the “superimposition of regimes” that evolve globally and structurally under the strategic influence of business, politicians, consumers, and citizens. According to Foran (2015, 668), detangling the politics of FEW security nexus regimes “provides essential social, structural, and political context, in contrast to the rather depoliticized and ahistorical treatment of social order and context in the dominant energy-water-food nexus literature.”

Part of politicizing the FEW security nexus paradigm involves raising questions about the function of securitization in this particular global environmental discourse. Whereas some scholars point to the intensifying security risks associated with conflict over scarce FEW resources, others warn that such narratives misdirect policies toward emergency-based, short-term solutions rather than long-term structural changes. Daher et al. (2017), for instance, contend that there are crucial security risks lying at the heart of FEW nexus challenges, which range from geopolitical competition over oil-rich land to the worsening of inter-ethnic conflict due to resource scarcity in places like Kenya and Ethiopia. On the other hand, Srivastava and Mehta (2014) warn against framing the FEW nexus in alarmist, securitized terms, which they argue depoliticizes the complex mechanisms that impact human rights and well-being and result in elite actors governing national security agendas that rely on resource capture rather than forward-

thinking creativity. As they put it succinctly, “if our point of departure accepts the primacy of states and the preservation of the status quo, i.e. securing 'our' environment relative to changing resource endowments in a capitalist neoliberal world, then we are accepting a world in constant crisis” (Srivastava and Mehta 2014, 3). Moving forward, it is thus crucial to develop a systems perspective that includes the roles of power and justice in FEW nexus thinking, especially as they relate to function of security in this context.

**A Critical Systems Perspective of the FEW Security Nexus**

Building upon the work of Allouche et al. (2015; 2019) and Foran (2015), this section proposes a critical systems perspective of the FEW security nexus. In doing so, I call for more careful and explicit attention toward three key dimensions of the FEW security nexus: environment-security connections, processes of legitimation resulting from such connections, and the persistent role of power and contestation in the governance of FEW issues. Across these three different areas of concern, this systems approach also seeks to broaden the scope of actors analyzed to include both state and non-state subjects such as governments, IGOs, NGOs, transnational corporations, and resistance movements. Lastly, the systems framework proposed here advocates for greater attention toward the ways political discourses shape the theoretical and practical implementation of FEW nexus agendas, and thus calls for a deeper understanding of how securitized FEW nexus narratives draw from or challenge overarching structures of power. Analyzing the systemic connections between discourse and power can provide insight into how unequal and hierarchical systems shape the world political economy and global environmental governance more broadly, and can also help to pinpoint areas in which opportunities for steering FEW system relationships toward more just outcomes might exist.

The FEW security nexus is a particularly interesting global development paradigm because it is infused with securitized conceptions of human-nature relationships. Thus, actors implementing and designing FEW security nexus agendas often draw upon distinct discursive logics involving the designation of threats and the justification of subsequent responses. The inclusion of security rhetoric in a paradigm centered upon interconnectedness therefore results in emerging referent objects and agents of security that extend beyond traditional, territorially bounded states. It is crucial to understand how security functions in this space in contemporary and innovative ways and to analyze how securitization influences systemic relationships between different actors, especially those who face intensifying environmental risks and those who are deemed responsible for providing protection against those risks. Moreover, it is necessary to understand how securitization functions alongside, within, or against existing systems of global economic relations. In this context, I argue that a critical systems analysis should explicitly draw from security studies literature to develop a more nuanced understanding of the performativity of environmental security within the FEW nexus. This means questioning whether emergency rhetoric sidelines democratic debate, how and to what effect securitization takes on globalized dimensions, and whether securitization can serve justice-oriented objectives in certain contexts (Buzan et al. 1998; Bigo 2018; Booth 2017). More broadly, I ask the three following questions: How is security conceptualized within the FEW security nexus development paradigm? How is security related to legitimacy in this context? How are these notions of environmental security contested and re-articulated by resistance groups?

It follows then, that a critical systems perspective of the nexus should also take into account the legitimating impacts of this securitized agenda. As critical security scholars like Browning and McDonald (2011) point out, security is a powerful concept that can legitimize certain actors

or political communities while delegitimizing others. Therefore, a critical systems perspective of the FEW security nexus should deconstruct the complex relationships between security and legitimacy, especially in an attempt to understand how they impact the distribution of authority across different actors. This will allow for greater insight into how the complex governance systems shaping FEW issues come into being, and will make the allocation of decision-making authority and its impact on risk mitigation across the FEW nexus more susceptible to scrutiny. In contradiction to the argument that a human-centric perspective of the FEW nexus displaces concerns about the "natural world" in favor of survivalist policies (Degranade et al. 2016), I argue that a critical systems approach must necessarily embrace a socio-ecological lens that recognizes the important role of human decision-making in shaping how humans and nonhumans relate to and interact with their "natural" surroundings. Therefore, it is crucial to interrogate how FEW nexus policies and initiatives build upon a certain arrangement of governing actors that steer the socio-ecological systems within which FEW issues emerge. Placing the connection between securitization and legitimacy at the forefront of systems analyses can significantly further this objective.

Lastly, a critical systems perspective of the FEW nexus should remain attentive to both hegemonic and counter-hegemonic articulations of what it means to be secure amid intensifying environmental change. In other words, it is important to investigate sites of contestation where various actors might challenge dominant governance arrangements and policy proscriptions in favor of alternative approaches to governing FEW issues. Within such alternatives might lie innovative, creative, and more equitable solutions that remain overshadowed or subjugated by the normalized acceptance of market-centric responses, which receive continued support from prevailing political and economic systems (Foran 2015, 669). Given the importance of sites of

contestation for shaping the practical and theoretical evolution of FEW nexus governance, scholars should seek to understand the emergence and mitigation of risks and vulnerability from perspectives of struggle and contestation (Aradua 2018). This would then allow for a critical systems-thinking approach in which scholars recognize intersubjective politics as playing an important role in steering the collective yet often unequal experiences of FEW challenges. Moreover, this approach would help scholars more precisely trace the power relations that influence the distribution of risk and decision-making authority across FEW systems, which are continuously evolving under conditions of contestation and struggle.

The figure below provides a visual representation of the key concepts that inform this critical systems-thinking perspective for advancing researching on the social and political impacts of the FEW security nexus development paradigm. Importantly, this map identifies the primary and overlapping structures, discourses, mechanisms, concepts, and socio-ecological relationships on which I focus in the remainder of this dissertation. More specifically, I draw from the figure below to guide my interpretation of the function of security across different domains of FEW nexus governance. In doing so, I seek to provide a thorough appraisal of the political systems and processes that form and legitimate bonds between and across particular sets of actors across the FEW security nexus. I apply this critical systems approach to three separate empirical studies in which I investigate the ways securitized FEW narratives emerge and operate across state and non-state actors including TNCs and resistance movements. In sum, I reveal how

security operates across the FEW nexus development paradigm, giving form to broader systems of global environmental governance.

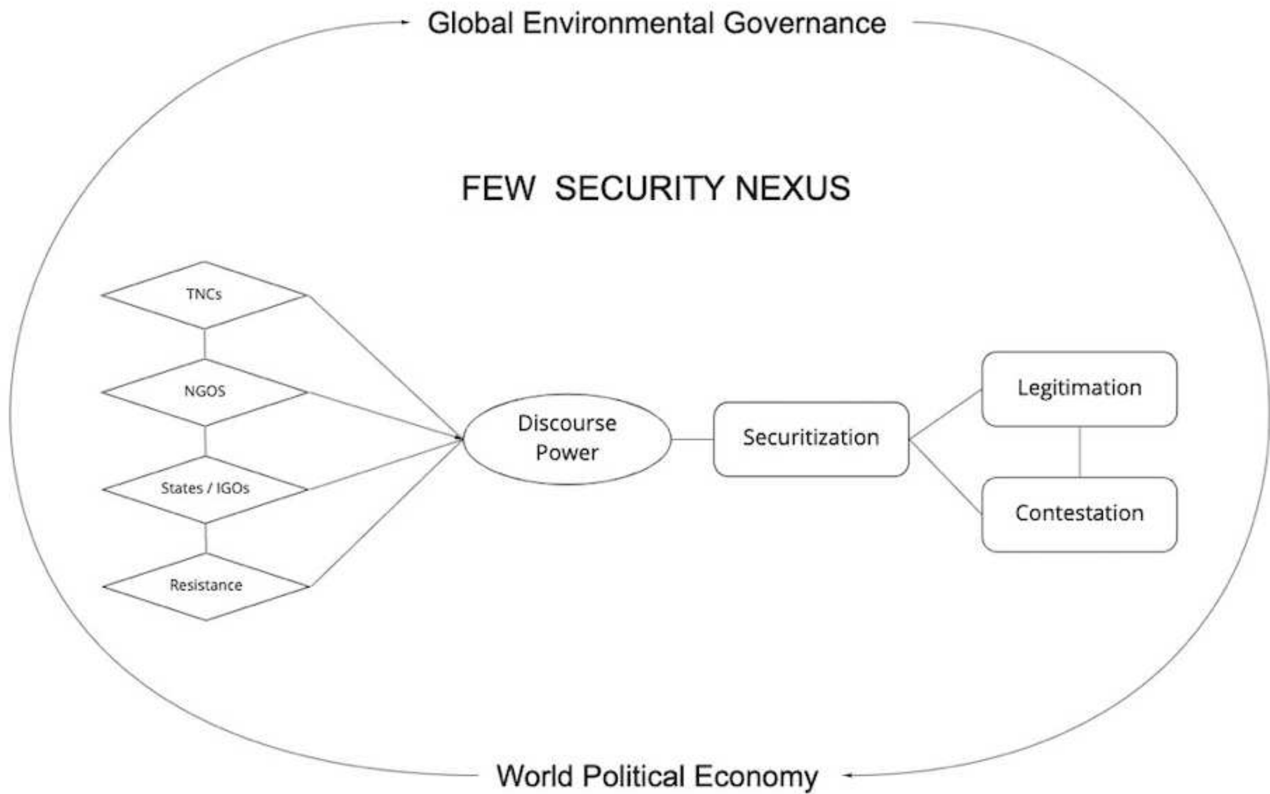


Figure 1. Concept Map of Critical Systems Perspective of FEW Security Nexus

In conclusion, this critical systems framework informs the following three empirical chapters in that I consistently reflect upon the ways power-dynamics, political economy, security, and governance processes shape relationships among actors operating across the FEW nexus. In chapter 4, for example, I point to the ways FEW security narratives espoused by NGOs, IGOs, and governments function to reinforce unequal relations of power across the global North and South and perpetuate market-oriented perspectives that condone the commodification of human-nature relations more broadly. In chapter 5, I attempt to detangle the avenues through

which environmental security intersects with legitimation processes among TNCs specializing in food, energy, and water production and management. Lastly, chapter 6 provides a deeper appraisal of the contestation surrounding environmental security in the context of resistance.

At a broader level, this critical systems approach infuses this project with an awareness of the meta-normative architecture of global environmental governance as a contested and uneven space that remains co-constituted by political economic trends and relationships. Taking into account the forces of capitalism, neoliberalism, and neocolonialism as the key drivers of today's current world economic order, this approach encourages a critical orientation toward both the ideational and material context within which legitimation and securitization operate. Capitalist modes of production, for instance, form the material basis through which human-nature relations become increasingly contradictory, precarious, and prone to emergency classification. As Moore (2015, 13) contends, "the emergence of Nature as a violent, but real, abstraction was fundamental to the cascading symbolic-material transformations of primitive accumulation in the rise of capitalism." In other words, capitalism set into motion the commodification of "nature" through wage labor and industrialization, and thus capitalist relations form the foundational context for accelerated rates of extraction, production, consumption, and socio-ecological risk (Moore 2015).

Moreover, from the 1970s onwards, neoliberal policy prescriptions pervading global decision-making spaces have locked into place a globalized socio-ecological landscape constituted by privatization, deregulation, and free trade, further accelerating and safeguarding capitalism's commodification of human-nature relations. Fraser (2019,13), for instance, details the impact of the "progressive neoliberal bloc" on the unequal and regressive character of

contemporary global politics, insisting that neoliberal policies have further entrenched exploitative modes of capitalist production:

> Determined to unshackle market forces from the heavy hand of the state and the millstone of 'tax and spend,' the classes that led this bloc aimed to liberalize and globalize the capitalist economy. What that meant, in reality, was financialization: dismantling barriers to, and protections from, the free movement of capital; deregulating banking and ballooning predatory debt; deindustrializing; weakening unions; and spreading precarious, badly paid work.

This critical systems perspective therefore encourages an attentiveness to a world political economy comprised of capitalist and neoliberal structures, which shape the modes of discourse and power through which environmental politics intersect with the politics of securitization and associated mechanisms of legitimation and contestation.

Lastly, embedded within both global environmental governance and world political economic formations are particular North/South relations that also give form to both the discourse and practice of environmental security across the FEW nexus. Neocolonial power relations, for instance, continue to generate unequal modes of exploitation across the global North and South, underlying the social geographies of capitalist exploitation and informing the structural adjustment and predatory policies of neoliberal organizations including the World Bank and IMF. In the context of the FEW security nexus, neocolonial relations thus generate and perpetuate power dynamics of control, exploitation, dispossession, and governance of commodified natures. As Hamouchene (2019, 4) puts it:

Accumulation by dispossession has reaffirmed the role of Northern African countries as exporters of nature and suppliers of natural resources – such as oil and gas- and primary commodities heavily dependent on water and land, such as agricultural commodities. This role entrenches North Africa's subordinate insertion into the global capitalist economy, maintaining relations of imperialist domination and neo-colonial hierarchies.

In sum, contained within this critical systems framework is an understanding of the ways neocolonialism, capitalism, and neoliberalism mold structures of global environmental governance and world political economics. Taking these forces into consideration throughout this dissertation, I seek to use this critical systems approach to better understand and explore both the broad and specific contexts within which securitization, legitimation and contestation function across the FEW nexus.

# CHAPTER 4. CONCEPTIONS OF SECURITY IN GLOBAL ENVIRONMENTAL DISCOURSES: EXPLORING THE FEW SECURITY NEXUS[2]

The conceptual linkage between the environment and security is a particularly important relationship within the broader context of environmental change and global environmental governance. The environment-security connection has recently become a widely debated topic among a range of actors including governmental decision-makers, NGOs, academic scholars, and civil society. Within academia, scholars are divided between those who suggest this linkage is necessary for reconceptualizing security in the face of widespread environmental degradation (Homer-Dixon 1999; Conca and Dabelko 2002; Barnett and Adger 2007) and those who argue that security studies should be reserved for analyzing international power dynamics and militaristic competition among countries (Levy 1995; Deudney 1990). Despite this disagreement, inquiry into the connection between the environment and security has grown significantly in recent years and many scholars in political science, international relations and other disciplines are attempting to understand the practical and theoretical implications of bridging these two concepts.

As environmental security concepts proliferate within global debates about the environment and sustainable development, it is increasingly crucial to understand how securitization influences the architecture of global environmental governance, especially in relation to who governs and how. This paper explores the FEW security nexus– an integrative approach to sustainable development with significant global reach– to examine the implications of securitizing complex and systemic environmental issues on a global scale. The FEW security

[2] A version of this chapter was published in the journal *Critical Studies on Security* in April 2020

nexus is a particularly relevant political space because actors within and across this nexus frequently evoke the concept of security to articulate the risks and vulnerabilities associated with food, energy, and water scarcity. The persistent inclusion of businesses in proposed solutions to FEW issues also prompts important questions about the role of non-state actors in governing environment-security challenges. More broadly, the FEW security nexus adds an additional dimension to the environment-security debate by locating such connections within the diffusion of a new global development paradigm molded by state and non-state actors including NGOs, IGOs, and state governments, resulting in emerging referent objects and agents of security that extend beyond unitary states, individuals, or the environment.

Though scholars from a range of disciplines have contemplated the theoretical and practical implications of the FEW security nexus perspective (Leese and Meisch 2015; Pahl-Wostl, 2019; Lebel and Lebel, 2018; Romero-Lankao et al., 2018; Stein et al. 2018), it has yet to be examined strictly through an 'environmental security' lens. In filling this gap, I draw from a distinct body of the environmental security studies literature that seeks to understand how various securitizing agents redefine or transform the concept of security by discursively linking it to non-traditional issues like environmental change (Detraz 2009; McDonald 2011; Floyd and Matthew 2013). My findings suggest that the FEW nexus security logic positions scarcity as an external threat to economic productivity, and calls for efficient development strategies driven by private-sector agents as the appropriate response. Human security is subsidiary or tangential to the more pressing problem of securing productivity in the face of food, energy, and water scarcity. Emphasis on production as the referent object rather than states, individuals, or the environment represents a distinct alternative to previously identified environment-security discourses. This particular reformulation of security reinforces market-oriented principals of

sustainability by safeguarding productivity as a global referent object, perpetuates uneven political and economic relations across the global North and South, and has significant implications for the legitimacy of private sector actors and their position in matters of global security and global environmental governance.

In relation to the rest of the dissertation, this chapter begins my exploration into how securitization within the FEW nexus influences the politics of legitimation by deciphering how the embedded logic positions certain actors as legitimate agents of security within the context of certain threats, risks, referent objects, and responses. Moreover, this chapter investigates how both state and non-state actors— including NGOs such as WWF and WEF, IGOs such as IRENA and IFPRI, and the German government— take part in defining environment-security connections in distinct ways. Thus, this chapter begins to identify a wider spectrum of actors involved in drawing environment-security connections and provides an understanding of how elite, transnational securitization processes unfold within the FEW nexus paradigm.

**Discourses of Environmental Security**

Investigating the various elements of security language is necessary for understanding how distinct discourses inform prevailing perceptions of contemporary environment-security challenges and corresponding policy recommendations. Detraz (2009) provides a particularly in-depth assessment of different conceptions of environment-security connections within the relevant scholarly literature. More specifically, she identifies three separate discourses within the academic literature that articulate and give meaning to the environment–security relationship: (1) environmental conflict; (2) environmental security; (3) and ecological security. Her discursive

categorization provides a useful point of reference for scholars interested in analyzing the broad range of conversations that speak to both environmental and security issues.

First, the environmental conflict discourse links environmental degradation with traditional security concerns such as interstate competition and violent conflict (Detraz 2009, 2014). This interpretation of security–environment interactions is most concerned with the potential for resource scarcity to exacerbate social tensions, particularly among substate actors (Homer-Dixon 1999). Climactic changes, for example, can interfere with resource-based economic activities and reduce the capacity for governmental institutions to mitigate social and political strife among parties competing for shared resources (Hsiang, Burke, and Miguel 2013; Swatuk 2014). According to Detraz (2012), other contributing factors that might increase the likelihood of conflict over limited resources include population growth, migration, globalization, and inequality. Underlying this discourse is the suggestion that resource scarcity is first and foremost a challenge to institutional capacity of sovereign states. Rather than individuals or the environment, the environmental conflict narrative prioritizes the stability of the state as the main referent object (Detraz 2009). In practice, the environmental conflict discourse is most often used within government intuitions to point to the urgent task of ensuring national security in the face of environmental change (McDonald 2011).

Second, the environmental security discourse is more broadly concerned with the impact of environmental degradation on all human beings (Detraz 2009). This approach brings to bear the relationship between environmental degradation and notions of human security (Detraz 2009, 2014). Rather than the state, environmental security narratives emphasize individual well-being as the referent object of security (Detraz 2009). Consequently, questions of security are disassociated from militaristic or state-centric strategies and are reoriented towards ensuring

protection for everyone who is vulnerable to the wide range of risks associated with environmental change. Despite advancing a broader notion of security than the environmental conflict discourse, environmental security perspectives retain a fundamental distinction between humans and the environment.

Lastly, the ecological security discourse prioritizes the protection of ecosystems from human activity and assumes that humans and the environmental are inextricably linked (Detraz 2009). Instead of focusing on the security of human beings or the state, the ecological security approach considers the entirety of ecosystems to be the main referent object of security. Moreover, this discourse argues for the protection of all species (human and nonhuman) and ecosystems for their own sake, rather than protecting environmental resources based only on their value to humans. Those who favor an ecological security approach suggest that grappling with the threat of environmental degradation requires fundamentally reconceptualizing security while re-evaluating the core elements that shape human-environment interactions (McDonald 2011; Detraz, 2014; Swatuk 2014).

**Securitization of the Environment**

Redefining traditional notions of security is a central component of the environmental security studies literature, particularly because global environmental issues challenge the state-centric perspective that has informed a long era of security analyses. A common theme among the previously discussed discourses is that each contains language that pushes the boundaries (to varying degrees) of traditional, realist notions of security. Despite contestation about this process, securitizing agents have been prompted to reorient their terminology to adapt to new threats and vulnerabilities associated with environmental degradation. In practice, new

discourses about evolving elements of security have significant implications for the way security measures are operationalized, and understanding the performativity of these discourses requires engaging with theories of securitization and critical security studies.

Securitization theory as put forth by the Copenhagen School (Buzan, Wæver, and De Wilde, 1998) seeks to understand the implications of referring to non-military problems as "security" issues and argues that securitizing agents can frame anything as a security issue by describing it as an existential threat, thus asserting the need for extraordinary measures to contain or manage the issue. In other words, securitization is "the move that takes politics beyond the established rules of the game and frames the issue either as a special kind of politics or as above politics" (Buzan, Wæver, and De Wilde 1998, 23). As security evokes notions of urgency and survival, naming a problem as a security issue arguably places that problem within a political realm that is uniquely positioned beyond the logic of "normal" politics pertaining to less critical issues. Although securitization theory can be applied in a variety of ways, most analyses include an in-depth assessment of the securitizing actors, referent objects, and the audiences to whom securitizing actors are speaking (Buzan, Wæver, and De Wilde 1998). I draw from this securitization literature to analyze how the FEW nexus security logic adds a sense of urgency to particular political claims about what is at stake within the human-nature relationship.

Critical theory also informs securitization studies in that a significant portion of the literature attempts to deconstruct the ways distinct security discourses enable or limit certain reactions and legitimize or delegitimize certain actors, ultimately providing form to the political spaces in which social interactions unfold. As security logic expands into new arenas and its ideology governs much of modern politics, a major concern is that those promulgating narratives about new threats and risks are in a position to shape reactions and responses with little, if any,

democratic deliberation. In addition to questioning the constraints security logic might impose upon agencies and decision-making, Browning and McDonald (2011, 236) argue that a crucial objective of critical security studies should be to contemplate “what security does politically.” Given the socially powerful and evocative force of a term like security, a critical analysis of its performativity in the FEW security nexus is important for determining how this approach is imbued with a certain set of power relations among those who are defining the threat, those who are at risk, and those who are providing security in this arguably urgent context.

Critical assessments of security often warn that security discourses evoke the same hierarchies of power associated with the preservation of the state through militaristic or other exceptional measures (Agamben 2005; Burke 2007; van Munster 2007). While investigating what security “does,” however, Browning and McDonald (2011) propose that scholars avoid making claims about universal and transhistorical logics that inevitably accompany the term security. Instead, they emphasize that the function of security can unfold in a multitude of ways and the implications of securitizing a political issue can vary depending on historical, social, and political contexts. Rather than invariably evoking emerging action, security as a constructed concept can also inform what it means to feel safe (Bubandt 2005) and influence actions that are deemed sufficient to sustain well-being (Kramarz and Park 2016). Food security discourses, for example, rarely call for extraordinary measures, and instead center challenges around livelihoods, health, and distribution (Rosegrant et al. 2014; Weiler et al. 2015). However, food sovereignty movements contest the ways in which food security discourses portray solutions in terms of closing supply and demand gaps, which perpetuates status quo politics and economics rather than promoting equitable agency over food production, access to land and water, and the right to culturally acceptable food (Jarosz 2014).

Similarly, security in the FEW nexus is not necessarily a matter engendering extraordinary responses, but is instead construed as an issue of closing supply-demand gaps across food, energy, and water sectors. However, it is important to note that in other debates about securitizing distinct environmental issues, such as climate change, the potential to incite emergency action is often at the forefront of the conversation (Trombetta 2008). Moreover, separate variations of the FEW nexus that consider climate change in more depth might involve distinct modes and degrees of securitization that are not considered in the scope of this chapter. In viewing the FEW security nexus as a broad development paradigm, "climate change amplifies the significance and interdependence of this dynamic relationship, but is not seen within the nexus discourse as the primary driver for change" (Allouche et al., 2015, 611).

Whereas the FEW security nexus is embedded in a context of survival and urgency, both emergency responses as well as the 'threat' of climate change are overshadowed by concerns about managerial tactics for mitigating the impacts of environmental resource scarcities. Therefore, rather than serving as a route to extraordinary measures, the use of security language in this instance arguably initiates a process of legitimation through appeals to urgency, survival, and the need to provide stability in the face of depleting resources. This process of legitimation provides form and shape to the spaces in which environmental and security politics unfold, particularly in terms of who governs, for whom, and how. Thus, understanding the performativity of this kind of securitization requires a contextual approach that is attuned to the workings of power and agency.

McDonald (2011) exemplifies such a contextual and critical approach in his analysis of the securitization of climate change within states and intergovernmental organizations. His research specifically examines how separate climate security discourses address the following

questions: (1) What is the nature of the threat? (2) Whose security is at stake? (3) What are the suggested responses? (4) Who are the agents of security? (McDonald 2011). These four questions provide a framework for deconstructing the way environment-security connections shape relevant political communities. Therefore, these questions serve as an organizational scheme for the following discussion and analysis of the FEW security nexus. The key assertion here is that the FEW security nexus constructs a distinct security logic by addressing these questions in a unique way, distinguishing it from the previously discussed environment-security discourses; environmental conflict, environmental security, and ecological security. Moreover, answering this series of questions in the context of the FEW security nexus contributes to the broader literatures on critical security studies and global environmental governance, specifically because these questions help to reveal how environment-security narratives influence power relations, notions of agency, and architectures of governance in distinct and performative ways.

**The FEW Security Nexus**

The core tenets of the FEW security nexus as a cohesive approach to sustainable development were established in 2011 during a conference in Bonn, Germany titled 'The Water, Energy and Food Security Nexus – Solutions for the Green Economy.' This conference, held by the German government in cooperation with the International Food Policy Research Institute (IFPRI), the World Economic Forum (WEF), and the World Wide Fund for Nature (WWF), followed the 2008 World Economic Forum's call to explore the water nexus and was intended by the German government to elaborate key development strategies proposed during their 2001 Bonn International Conference on Freshwater (Srivastava and Mehta, 2014). The Bonn2011 conference was also meant to produce a set of policy recommendations that could inform the

sustainable development negotiations during the Rio+20 UN Conference on Climate Change (Leese and Meisch 2015).

Aligning with the Green Economy framework, the policy recommendations produced at Bonn 2011 include (1) optimizing resource allocation by encouraging an integrative approach to the management of water, energy, and food sectors; (2) ensuring access to natural resources while also increasing productivity and efficiency by monetizing ecosystem services; and (3) facilitating economic growth and poverty eradication through innovative sustainable development techniques that utilize technological advancements and policy coherence across sectors. Since 2011, these core ideas have been integrated into multiple governance realms and analysed by various academic scholars (Bazilian et al. 2011; Hoff 2011; Bogardi et al. 2012; Bizikova et al. 2013; Leese and Meisch 2015; Rasul and Sharma 2016). International institutions that have adopted elements of the FEW security nexus discourse include the Food and Agricultural Organisation (FAO), the World Economic Forum (WEF), and the International Renewable Energy Agency (IRENA). In January 2015, IRENA published a widely cited report titled 'Renewable Energy in the Water-Energy-Food Nexus', which was followed by a publication demonstrating Germany's leadership in transitioning to renewable energy (IRENA 2015b). In sum, 2011 serves as a benchmark year in which the FEW security nexus was solidified as an important part of global governance and was subsequently disseminated into global institutions, like IRENA, that are consistent with Green Economic transitions as exemplified in the German development context.

**Methods**

The FEW security nexus is an empirically interesting political arena because it is “driven by the alarmist rhetoric of uncertainty and scarcity” and “often couched in the language of security” (Srivastava and Mehta 2014, 1). To uncover the particularities of how security is connected to the environment and sustainable in the FEW nexus, I use discourse analysis to examine the Bonn 2011 documents and IRENA’s 2015 nexus report. An initial word frequency count of these documents confirms the repeated mention of security as the sixth most frequently used word after water, energy, food, nexus, and production, as indicated in the word cloud below. Therefore, this data set can be considered as representative of a policy domain in which various actors deliberate and give meaning to security in the context of sustainable development and environmental change.

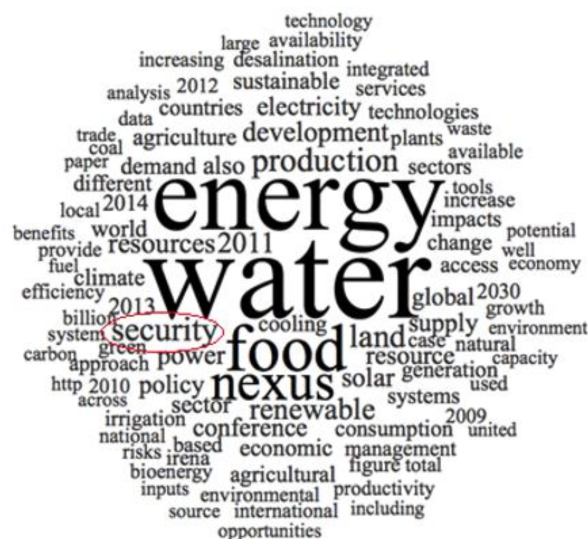


Figure 2. Word Cloud depicting 100 most frequently used words within Bonn2011 documents and IRENA nexus report

Such environment-security discourses also shape the terms of debate concerning who governs security and environmental issues, through what means, and for whom. Exploring how security functions in relation to these power dynamics is critical for understanding the wider

implications of the FEW security nexus. A discourse analytic approach is particularly useful for exploring how power moves through language while identifying the discursive construction of relationships between threats, referent objects, responses, and agents of security. To recognize these patterns, I embrace Hajer's (2006, 66) description of discourse as "an ensemble of ideas, concepts, and categories through which meaning is given to social and physical phenomena, which is produced and reproduced through an identifiable set of practices."

More specifically, I used content analysis within the broader framework of a discourse analytical approach to systematically extract and synthesize meaning from the documents. Despite frequently debated differences in ontology and epistemology, discourse analysis and content analysis can be used in conjunction with one another to facilitate nuanced understandings of social reality. According to Hardy et al. (2004), discourse analysis tries to systematically comprehend the construction of social meaning through contextual interpretation of language, whereas, content analysis is concerned with identifying precise textual categories that, upon quantitative analysis, can uncover an innately established reality. However, a qualitative approach to content analysis, which considers the context in which words and ideas are embedded, can be compatible with a discourse analytic methodology (Hardy et al. 2004, 20). For instance, I used an interpretivist form of content analysis in that I systematically examined the occurrence of words while also exploring the surrounding text to remain reflexive about the meaning and fluid usage of those words. I also assessed larger portions of text to identify broader ideas and concepts that pertained to the language of securitization. I explored the documents schematically by basing my interpretations on existing research about environment-security discourse (as outlined above) while also allowing distinct conceptions of security to emerge from the data.

In terms of technique, I applied Lofland's (1995, 200) definition of coding as “the process of sorting your data into various categories that organize it and render it meaningful from the vantage point of one or more frameworks or sets of ideas.” First, I read the documents in their entirety to complete initial coding and to identify portions of text relevant to environment-security connections. I then used a combination of strategies including “concept coding” to indicate abstract ideas and “in vivo” coding to reveal patterns in the language used to conceptualize security (Saldaña, 2016). I also kept analytical memos to elaborate on the codes as well as the emergence of theoretical relationships among them. Nvivo software was used to manage the documents, perform coding tasks, assess conceptual relationships among codes, and to keep records of analytical notes.

The methodological approach in this chapter acknowledges the impact that communicative interaction has on the operation of security in practice. Discourses that securitize the environment shape social reality by constructing relationships between threats, referent objects, responses, and agents of security. Environment-security discourses also shape the terms of debate concerning who governs issues of security and the environment, through what means, and for whom. Therefore, a discourse analytic approach is particularly appropriate for this research project because the language of securitization has far-reaching implications for the power, authority, and the extent to which vulnerabilities are mitigated. Browning and McDonald (2011, 239), for example, suggest that discourse analytic approaches tend to “focus on the ways in which representations or discourses of security encourage sets of practices, legitimize particular actors or indeed constitute political communities and their limits in particular ways.” Throughout the course of analyzing the FEW security nexus, I remained reflexive about the

particular discursive structure used to combine security logic with environmental governance strategies.

### Analysis and Discussion

In this section, I analyze and describe the discourse that links the environment with security in the WEF security nexus. To guide my discussion, I draw from the previously conducted analyses of scholars working within the realm of environmental and critical security studies. In particular, I use Detraz's (2009) typology of environment-security discourses to situate the WEF security nexus in the broader range of conceptual links between the environment and security. As noted previously, McDonald (2013) emphasizes an important set of questions concerning the securitization of non-military threats (What is the nature of the threat? What or whose security is most at stake? What should responses to this threat look like? Who are the agents of security?), which I use to assess the security logic within the WEF security nexus and to address the political implications of this particular discourse. These four questions serve as an organizational scheme for this section because they bring to the fore the underlying process of securitizations and also allow me to characterize the specific environment-security linkage in the WEF nexus. They are presented in this particular order to exemplify the process whereby naming a perceived threat can influence subsequent discussions about risks, responses, and agency. The key assertion here is that the WEF security nexus represents its own security logic by addressing these questions in a distinct way. This logic suggests that scarcity is an external threat to economic productivity and supply, and thus requires efficient sustainable development responses driven by private sector agents. In what follows, I attempt to deconstruct the nuances of this security logic and the associated performative implications. I conclude with a general assessment

of the WEF security nexus and its utility as an approach to governing global and environmental security issues.

*What is the nature of the threat?*

The objective of the FEW security nexus is to achieve an integrative approach to sustainable development that considers synergies and trade-offs among water, energy and food sectors (Hoff 2011). Ultimately, this approach is intended to encourage efficient use of the limited natural resources that underpin these three sectors. The main premise of the FEW security nexus rests on the notion that resource scarcity poses significant challenges to economic production and development. Further, the FEW security nexus positions these challenges within the context of security language and designates resource scarcity as the overarching security threat.

The FEW security nexus portrays resource scarcity as an external threat both implicitly and explicitly with the use of security terms and concepts. For example, various connections between threats to security, resource scarcity, and sustainable production are exemplified in the following excerpt from the IRENA report:

> Energy security, for example, is threatened by the lack of available water resources for thermo- electric power, nuclear power and hydropower plants. Conversely, a disruption in energy supply can affect water security by negatively influencing water pumping, treatment and delivery. Limited water availability also poses critical threats to achieving food security, as severe droughts can catalyze food crisis, particularly in arid and infrastructure-poor areas (IRENA 2015, 25).

Although other subsidiary threats are alluded to in the FEW security nexus, such as climate change and poor regulations, discourse analysis of Bonn2011 and the IRENA report reveal a fundamental capitalist concern for ensuring protection against the constraints posed by limited resource availability. Secondary threats like climate change and poor governance strategies are dangerous insofar as they intensify and exacerbate the latent issue of resource scarcity. Moreover, the risks and vulnerabilities stemming from lack of available resources are articulated through a predominately technocratic understanding of sector-based relationships.

The FEW security nexus focuses on finite natural resources in a different context than both the environmental conflict and environmental security discourse in that scarcity is presented first and foremost as an economic concern rather than a national or human security issue. The idea that resource scarcity is a security threat is not unique to the FEW security nexus. In fact, concerns about limited natural resources have constituted much of the environmental debate since the 1970s and references to resource scarcity are prevalent among various environment-security discourses (Meadows et al. 1972; Detraz 2009; Dalby 2009). However, scholars often debate whether highlighting resource scarcity as the most paramount environmental issue encourages proper solutions to environmental degradation.

Such debates regarding the notion of scarcity point to three important implications relating to anthropocentrism, inequities, and environmental cooperation. First, highlighting issues of limited resource availability emphasizes the environment's role in supporting human life, but not vice versa. Notions of scarcity reinforce the anthropocentric division between humans and nature, perpetuating utilitarian perspectives towards the environment (Zimmerman 1994; Merchant 1996). Second, scarcity concerns often elicit policy agendas that disregard underlying sources of environmental injustice and inequality (Clark and Foster 2010). For

instance, environmental scarcity dialogues often point to population growth as one of the primary contributors to demand and supply induced resource scarcity, which many ecofeminists say encourages a gendered perception of the problem in that women, particularly poor women, are targeted for their roles as child bearers (Detraz 2009, 2012). Lastly, rather than instilling a cooperative agenda, focusing on scarcity generally implies the potential for conflict rather than the capacity for peacebuilding through environmental cooperation (Conca and Dabelko 2002).

Although the FEW security nexus is concerned with addressing economic productivity rather than mitigating social tension, there are segments of text in the data that contain conflict-oriented descriptions of environmental issues. For example, the Bonn2011 Conference Synopsis refers to war as a potential consequence of limited resources:

> As we explore ways to increase efficiency and productivity along the nexus, we can see that there are many similarities among the three sectors. All three have rapidly growing global demand; all are impacted by international trade; all suffer resource constraints leading to rivalry, conflict and war; all have strong interdependence with each other and with climate change and the environment; all have deep security issues; all are fundamental to the functioning of society, and all have heavily regulated markets (Bonn2011 Conference, 2012b, 15).

The relationship between conflict and environmental degradation is certainly an issue that deserves serious consideration, as it is increasingly important to recognize the interdependencies between socio-economic relations and natural resource use. However, others argue that unsubstantiated conflict rhetoric can distract from the wide range of policies needed to

comprehensively address the diverse impacts of global environmental change (Detraz and Betsill 2009).

*What or whose security is most at stake?*

The FEW security nexus generally relies on the Green Economy framework to support the objective of sustaining economic growth in the face of limited environmental resources. Green Economic policies are aimed at increasing resource use efficiency in order to "create more with less" (Bonn2011 Conference 2011, 15). This approach aims to decouple environmental degradation from economic growth to ensure sufficient levels of productivity while relieving environmental stresses caused by production mechanisms (Clapp 2014). The FEW security nexus refers to these guiding principles to highlight the importance of adopting a comprehensive plan for sustainable development. For instance, the background paper for Bonn2011 suggests the Green Economy approach "seeks, in principle, to unite under a single banner the entire suite of economic policies (. . .) of relevance to sustainable development. Hence the Green Economy itself is the nexus approach par excellence" (Hoff 2011, 6).

While elements of environmental conditions and livelihoods might benefit from greater resource use efficiency instilled through Green Economic policies, neither the environment nor people are referent objects of this security logic. Instead, discourse and content analysis of the Bonn2011 conference and IRENA report show sector-based production and supply to be the main referent objects in this particular environment-security discourse. Leese and Meisch (2015) arrive at a similar conclusion upon their analysis of Bonn2011 through a Foucauldian lens. More specifically, they argue that the FEW security nexus advances an underlying conception of

security amid neoliberal propositions to ensure that neoliberal mechanisms remain productive (and unquestioned), despite valuable resource constraints (Leese and Meisch 2015).

This is consistent with observations made within environmental security studies, as Dalby (2009, 165) notes, "most frequently in security thinking it's the political order that supposedly provides security that is rendered the essential entity that must be secured." However, rather than a state- centric political order, the FEW security nexus aims to secure the foundational sectors that support the structure of the global economy, and safeguarding current modes of economic production is arguably one of the main prerogatives of contemporary hegemonic security discourses (Dalby 2015). The goals of the FEW security nexus, for instance, are couched in language that prioritizes the continued acceleration of growth and productivity as the ultimate means through which to ensure security. Such goals include ". . . increasing resource productivity, establishing mechanisms to identify the optimal allocation of scarce resources for productive purposes, and sustainably intensifying the use of land and water to achieve equitable social, economic and environmentally sound development" (Bonn2011 Conference 2011, 2).

The FEW security nexus is in some ways consistent with the environmental security discourse because it highlights the importance of accelerating access to resources for "the bottom billion" (Hoff 2011). Both data sources show abundant consideration for the needs of the global South and both sets of documents emphasize the importance of combating global poverty. However, achieving more equitable resource access is primarily deemed essential as a necessary step towards securing growth and productivity in the global economy. Messages from Bonn2011, for instance, argue for increased resource access by suggesting that "clearly, human and environmental health are closely linked. Access to clean water is a strong determinant of human health, and healthy people contribute more to economic development" (Bonn2011 Conference

2011, 10). Therefore, the technocratic solutions and integrated policy coherence that constitute the FEW nexus approach are aimed toward ensuring human security insofar as such initiatives also enhance economic growth, which obscures the threat of persistent affluence in industrialized countries and instead focuses on encouraging proper and efficient development strategies in the global South (Lélé 1991).

Securing productivity also raises the question of whether economic growth is feasible or even desirable in the context of global environmental change, as some scholars caution against managing natural resources under the same growth principles that led to their depletion and uneven distribution (Princen 2005; Dabelko 2008; Kallis, Kerschner, and Martinez-Alier 2012; Newell 2012; Swatuk 2014). For example, Princen (2005, 337) suggests that efficiency suffers from "normative neutrality" because the principle of efficiency has become so normalized that people rarely question the consequences of using its simplistic logic to solve some of the most pervasive, unmanageable, and complex issues of our time. Alternatively, sufficiency would offer a much more complex-attentive framework for social organization and would also encourage long-term perspectives that are more sensitive to ecological risks and constraints (Princen 2005, 379).

*What should responses look like?*

In response to the threat environmental scarcities pose to economic growth and productivity, the FEW security nexus advocates for technological innovation, sustainable development, increased policy coherence, and the commodification of natural resources (Hoff 2011). Additionally, enhancing data collection to facilitate quantitative analysis of trade-offs among the water, energy and food sectors is integral to the FEW security nexus approach. While

such responses might encourage more equitable and efficient production strategies across sectors, they offer mainly technocratic and managerial solutions to complex social problems and do little to address structural sources of environmental insecurity.

The FEW security approach is centered on sustainable development policy prescriptions that are to be implemented within the parameters of the Green Economy. Within this framework, the tools used to manage security risks are market-based strategies, sophisticated measurement mechanisms, and technological innovations. These types of responses are emphasized in the Bonn2011 background paper, which specifically emphasizes the point that "innovation to improve resource use efficiency requires investment and reductions in economic distortions. Economic instruments for stimulating investment include, e.g., pricing of resources and ecosystem services, water markets and tradeable rights, and payments for ecosystem services" (Hoff 2011, 5).

Moreover, this discourse places technological innovation spurred by market-based competition at the foreground of an integrative nexus approach and suggests that "beyond responsiveness to market signals and government regulation, responsible business leaders have increasingly taken the lead in identifying innovative approaches and technological advances consistent with the inter- linked perspective of the nexus" (Bonn2011 Conference 2012a, 22).

This version of sustainable development and its capacity to mitigate the effects of environmental change has engendered much debate and criticism among scholars of environmental politics (Lélé 1991; Hajer et al., 2015; Fuchs 2017). There are two important implications to consider when employing sustainable development as a security strategy in this context. First, policy prescriptions associated with sustainable development tend to ignore the dynamic, socio-economic sources of environmental vulnerabilities. For example, sustainable

development policies usually obscure the way one's experience with environmental change and economic development varies based on race, gender, and class. Second, most notions of sustainable development take for granted the over-arching organization of global capital that reinforces patterns of resource capture and environmental instrumentalism. More specifically, sustainable development strategies often prioritize market mechanisms such as natural resource pricing and financial trading schemes, which are arguably practices that constitute the underlying drivers of many environmental issues. Quantitative indicators, which are characteristic of market-based assessments of progress, fail to capture the multi-dimensionality of security threats (Swatuk 2014). Rather, the origins of environmental insecurities are complex and shaped by the various factors that influence how individuals interact with and are exposed to political, economic, and environmental systems.

*Who are the agents of security?*

Although the FEW security nexus frequently refers to the importance of a multi-stakeholder approach to managing resource-use efficiency, the documents overwhelmingly suggest that most influential agents of security are actors within the private sector. This is consistent with a Green Economy approach that identifies the most relevant actors as those who are in a position to support economic growth and sustainable development. In this case, businesses and existing economic institutions are responsible for securing resource productivity against environmental resource constraints, and ostensibly, for offering security to "the most vulnerable" groups facing environmental challenges. Here, for example, Bonn2011 Messages draw attention to private actors as the key drivers of change:

> While the opportunities of the nexus perspective and their social, environmental and economic benefits are real, implementation requires the right policies, incentives and encouragement, institutions up to the task, leadership as well as empowerment, research, information and education. Accelerating the involvement of the private sector through making the business case for sustainability and the nexus is essential for driving change and getting to scale. In any case, a true nexus approach can only be achieved through close collaboration of all actors from all sectors. (Bonn2011 Conference 2011, 3)

This environment-security discourse legitimizes economic actors as key agents of change, meaning that instead of relying on nationally bounded strategies, agents of security can operate in spheres of authority that transcend state borders. In this regard, the FEW security nexus correlates more closely with environmental security discourses rather than environmental conflict discourses because security strategies are disassociated from state-centric mechanisms. However, this logic also suggests that the agents of security reside within existing economic institutions and businesses, making revolutionary socio-ecological changes unnecessary. This sets the FEW security nexus apart from ecological security perspectives, which argue for systemic transformations as opposed to revising existing institutions.

With regards to locations of agency and authority, the FEW security nexus represents a significant shift in the broader structure of global affairs because private actors, as opposed to state-centric institutions, are expected to mitigate security risks that transcend borders and evade traditional risk calculations. Consequently, the FEW security nexus is relevant to ongoing scholarly debates about accountability and legitimacy in environmental politics, which have emerged in conjunction with shifting norms in governance arrangements. Among other issues,

these debates look at how non-state actors influence the way governance organizations respond to issues regarding responsibility, stakeholders, justice, and inclusiveness (Bäckstrand 2006). Scholte (2011, 16) broadly defines accountably as ”a condition and process whereby an actor answers for its conduct to those whom it affects.“ However, notions of accountability are frequently contested, and global environmental governance scholars provide multiple interpretations of the dynamic spheres and sources of accountability (Biermann and Gupta 2011; Barnett 2016). Although some scholars underscore the notion that private sectors actors could foster more stakeholder participation and environmental justice (Kramarz and Park 2016), others are more skeptical about the capacity for non-state actors to instill "democratic globalism," particularly when the forces of capitalism are at play (Shamir 2010).

Such debates concerning accountability also interrogate the means through which agents govern and for whom they govern. In the FEW security nexus, private sector actors are given the responsibility of using quantitative indicators to govern inefficiencies across water, energy, and food sectors. Ultimately, this security logic relies on businesses to employ technocratic measurements to better understand nexus trade-offs and synergies to mitigate "insecurities" arising from resource scarcity. For example, the Background Paper for Bonn2011 states that a nexus perspective can encourage efficiency and capacity building because " . . . new and targeted trans-disciplinary nexus research, fully integrated assessments of water, energy and food at all scales, and Green Economy metrics and indicators will enable quantitative trade-off analyses" (Hoff 2011, 6). Moreover, IRENA's nexus report makes the case for using quantitative tools to inform "nexus friendly" decision-making (IRENA 2015, 86). Aside from measuring financial trade-offs, quantitative indicators can have a performative role in constituting the actors, objects, and relationships in transnational governance arrangements (Hansen and Porter 2012). In this

case, security scholars and practitioners should question the use of such indicators in terms of their capacity to adequately address environmental risk and vulnerabilities. Within this approach, it is important to deconstruct the socially negotiated values that inform environmental accounting, particularly if private entities are to be held accountable for deriving such measurements and using them to ensure security in the face of environmental change.

## Conclusion: Power and the WEF Security Nexus

The FEW security nexus represents a departure from other environment-security discourses in that productivity is the main referent object rather than states, individuals, or the environment. Moreover, its unique security logic designates private sector actors as emerging agents of security that are aptly capable of steering efficient, cross-sector innovations to mitigate the threat scarcity poses to production processes. The implications of this security logic are fundamentally rooted in underlying power dynamics across three important aspects of global environmental governance: capitalism, North/South relations, and private governance.

By positioning productivity as a referent object, the FEW security nexus reinforces market-oriented policy prescriptions to environmental challenges that are consistent with contemporary modes of capitalism. In this case, the urgency of security serves to obscure the underlying sources of unevenly distributed environmental insecurities that stem from unequal exposure and access to market-based production mechanisms (Clark and Foster 2010). By wrapping the need to maintain productivity in security language, this discourse also further normalizes the notion that economic growth is natural and desired, thus securing the status quo (Dalby 2009; Leese and Meisch 2015) rather than promoting transitions towards a more equitable system that extends agency over natural resource use to a wider range of communities.

By reifying capitalist modes of production, the FEW security discourse remains unreflective of the ways commodifying environmental "services" perpetuates both the domination of humans over nature as well as mechanisms that disproportionately distribute environmental harms on the basis of race, gender, and class (Mohai, Pellow, and Roberts 2009).

On a global scale, the growth-oriented perspective embedded within the FEW security nexus also obscures key concepts like "ecologically unequal exchange" which suggest that the global South and marginalized groups bear the brunt of environmental risks associated with resource intensive production chains that systematically move materials from the global South to the global North (Roberts and Parks, 2009). As Lélé (1991) argues, such sustainable development perspectives place most of the burden on the global South to engage in structural value adjustments so that economic growth and abundance can continue in the global North. Therefore, the onus often falls on the global South to implement resource efficient technologies and innovative techniques, which are often funded and managed by powerful elites and high-income countries in the global North (Middleton, Gyawali, and Allen 2015; Detraz 2016). This imbalance in perceived need for change can potentially explain why the Bonn2011 conference and IRENA report almost exclusively refer to case studies concerning efficiency opportunities and challenges in regions located in the global South.

Lastly, by designating private sector actors as agents of security, the FEW security nexus uniquely brings to bear both securitization and legitimation within the context of private environmental governance. More specifically, the security logic of the FEW nexus is relevant to important debates about the evolution of global governance insofar as new and dynamic actors beyond the state are claiming authority over global-scale challenges (Vogel 2008; Dingwerth 2017). While the Green Economy framework champions businesses as pioneers in sustainable

development, some scholars take caution in acknowledging the power and reach of private corporate actors, suggesting that their intensified impact on global environmental governance can perpetuate socially and environmentally exploitative practices (Dauvergne 2010). This debate also explores how private actors retain and gain legitimacy despite growing pressure to conduct their affairs in more socially and environmentally responsible ways (Mayes 2015). Certain standards like inclusiveness, knowledge, efficiency, and leadership can help private businesses acquire legitimacy as well as power to expand their reach across markets (Scholte 2011; Bäckstrand 2006; Mayes 2015). The FEW security nexus indicates a potentially new source of legitimacy for private sector actors in global environmental governance, which is the capacity to provide security and stability in the face of environmental resource scarcities. In the chapters that follow, I explore whether there is a proliferation of private sector actors using environment-security concepts as a source of legitimacy in global environmental governance, and how such discourses are constructed, operationalized, or challenged.

# CHAPTER 5. ENVIRONMENTAL SECURITY AS A SOURCE OF NON-STATE LEGITIMACY: AN ANALYSIS OF CORPORATE GOVERNANCE[3]

Environmental security has become a popular and strategic frame of reference for various global actors concerned about confronting wide-spread ecological degradation and exploitation. In such contexts, environmental security serves as an analytical concept through which actors grapple with and debate the risks posed by severe changes driven by warming, drought, floods, scarcity, or land acquisition. Scholars drawing attention to environmental security as a crucial domain of global politics highlight the increasingly dire vulnerabilities and losses associated with these trends— such as reduced access to essential resources, the heightened likelihood of conflict, damage to livelihoods and infrastructure, and displacement by disasters (Barnett 2001; Floyd and Matthew 2013; Busby et al. 2014). On the other hand, theoretical and normative interpretations of environmental security generate important insight into how the meaning and practice of security are fundamentally changing as society confronts dangerous Earth system transformations (Trombetta 2008; Dalby 2017; McDonald 2018). Still, others have cautioned against applying a security lens to environmental problems at the expense of democratic deliberation or a broader understanding of the political and economic factors that generate environmental violence (Deudney 1990; Peluso et al. 2001). In contributing to this vast discussion about the relationship between environmental change and security, this paper argues that greater insight into how environmental security discourses shape the politics of legitimacy on a transnational scale is needed to better understand how this provocative concept impacts the cross-border governance of socio-ecological politics.

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Although many scholars have investigated the emergence and implications of environmental security narratives among academic, state, and intergovernmental institutions, the mechanisms through which environmental security discourses mold power relations among non-state actors at the transnational level remain significantly underexplored. For instance, research on environmental security discourses exposes how securitized narratives permeate influential political domains including the United Nations Security Council, European Union, North-Atlantic Treaty Organization, and various domestic governments, driving environmental governance agendas toward state-centric, conflict-oriented, or human-centric aims (Detraz and Betsill 2009; McDonald 2013; Delmuth et al. 2018; Hardt 2018). Though this literature deals with key concerns regarding the political consequences of securitizing environmental issues, it remains tied to a conventional governmental lens wherein state elites are the key securitizing actors. This comes at the expense of analyzing the broader spaces of transnational governance in which a multitude of actors engage with the politics of environmental security with varying implications for the contested landscape of global environmental governance.

This paper applies a transnational perspective to account for a wider assemblage of actors beyond the state who are engaging with environmental security as a contested concept. More specifically, I expose the linkages between contemporary global governance arrangements and environmental security by investigating how non-state actors, specifically TNCs, leverage environmental security discourses in attempts to acquire legitimacy as global governors of cross-border resource systems. I empirically investigate this process by exploring the different ways that three TNCs operating across the FEW nexus— Nutrien (food), BP (energy), and Veolia (water)— integrate legitimacy claims relating to environmental security into their broader environmental governance agendas. To guide this analysis, I return to my synthesis of global

environmental governance and critical security studies from chapter 2 to inform my exploration of the particular processes and concepts through which securitization of cross-border environmental issues can shape the legitimacy of transnational actors— in this case, TNCs.

In this chapter, I show how FEW security nexus as a global development paradigm contains distinct connections between environmental security and non-state authority. Practitioners implementing and designing policies associated with the FEW nexus framework, for example, resort to the language of security to describe the threats and risks posed by dwindling food, energy, and water resources, and at the same time, call upon private sector actors to lead global responses to such cross-border security challenges. Thus, the FEW security nexus serves as a relevant political space in which to explore the interplay between non-state governance mechanisms, environmental security, and legitimacy. Specifically, I focus on how private actors governing social and material features of the FEW nexus—namely corporations specializing in agricultural production, oil and gas extraction, and water management—strategically leverage concerns about environmental security to articulate the legitimacy of their respective roles in global politics. Although each TNC primarily specializes in a different resource sector, after a deeper look at their operations it is evident that BP, Nutrien, and Veolia heavily rely on and influence the deeply intertwined nature of food, energy, and water systems. Therefore, this paper validates the FEW nexus as an important area of study, and at the same time, critically analyzes the implications of prevailing FEW nexus development narratives.

Legitimacy serves as the core unifying concept in this paper through which I attempt to detangle connections between political authority, security, and environmental issues. These connections are particularly interesting in a contemporary global context in which non-state actors rely on unique legitimating processes to compensate for their lack of traditional

legitimating ties to a territorially bounded citizenry. Non-state actors, for instance, might seek legitimacy by capitalizing on various aspects of their technical expertise, moral standing, institutional embeddedness, procedural accountability, or financial capacities (Cashore 2002; Avant et al. 2010; Scholte 2011; Tallberg et al. 2018). More broadly, I find that the prevailing literature on legitimacy points to four key categories that provide conceptual backing to legitimacy claims: governance gaps, democratic principles, structural forces, and relevant audiences. This project, therefore, investigates the presence of such legitimizing concepts within environmental security discourses leveraged by TNCs to show how environmental security politics are imbricated in legitimation processes among non-state actors.

While other scholars have assessed the widening reach of securitization in a globalized world order, their findings often focus on the cross-border proliferation of military or paramilitary personnel that uphold state-sanctioned, yet transnational, security policies. Instead, this chapter turns toward the politics of legitimacy to reveal how non-state actors claim authority over security, and in this case environmental security, to shape their own standing in a globalized arena. It is important to note that this paper explores legitimacy *claims* rather than measurements of legitimacy among non-state actors. In doing so, I seek to reveal how non-state actors are shaping debates about who should govern environmental security, how, and for whom. Future research might extend this analysis to determine the legitimating effects of such claims.

In the following section, I review the prevailing debates about environmental security as an evolving analytical, theoretical, and practical concept. I then turn to the literatures on global environmental governance and critical security studies to gather pertinent insights on non-state legitimacy, power, and security— after which I present a conceptual synthesis that provides a theoretical basis from which to assess the role of environmental security as a source of

legitimacy among non-state actors. I then justify my methodological choices and case selection before discussing the results of my analysis, which are structured around four key conceptual categories: governance gaps, democratic principles, structure, and audience. I conclude by suggesting that environmental security discourses can significantly reconfigure the architecture of global environmental governance in terms of which actors can claim authority over security matters. I ultimately argue that a political economic lens is necessary for understanding how such legitimating discourses influence the preservation of detrimental extractive systems.

**Environmental Security**

As climate change worsens and environmental degradation endangers planetary life, a growing number of IR scholars, security analysists, and development practitioners contend that dealing with such challenges requires a new approach to security that considers the environment. This movement has sparked compelling debates about how to connect the environment to politics of security, and whether securitizing the environment helps or hinders collective action toward resolving complex environmental challenges. While some who approaches this connection remain tied to militaristic modes of risk calculation and operate within conflict-oriented systems of analyses (Busby et al. 2014), albeit with the added consideration of environmental risk, others debate how the traditional meaning of security is or should be ruptured in light of fundamental changes to global politics posed by new socio-ecological conditions (Dalby 2009; Trombetta 2008; McDonald 2018). Importantly, debates about environmental security serve as rich point of reference from which to assess how authority over global security is evolving, as both the drivers and impacts of ecological risk challenge conventional ties between security, legitimacy, and territorially bounded states.

Scholars and practitioners who embrace environmental security as an analytical lens are raising concerns about a new suit of threats including extreme droughts and floods, transboundary pollution, intensifying natural disasters, and resource scarcities (Floyd and Matthew 2013), and the weight of security rhetoric has arguably elevated such environmental issues to a realm of "high politics," where power and resources are more concentrated and available (Jayaram 2020; Graeger 1996). It is now quite common, for instance, for national security agencies to consider connections between climate change, conflict, and security interests. Moreover, the notion that climate change acts as a "threat multiplier," is also a popular idea against which scholars, security practitioners, and think tank intellectuals rest their claims about the degrees of causality between climate change and conflict (Gleick 2014; Busby 2008). Others emphasize human security or peacebuilding strategies and explore whether efforts toward improving shared environmental conditions might aid peace processes in conflict-prone areas (Morales-Muñoz 2021; Barnett and Adger 2007; Conca and Dabelko 2002).

Meanwhile, some scholars take a more normative or theoretical approach toward understanding the implications of linking environmental politics with security. As McDonald (2018, 154) suggests, "different conceptions of the climate change–security relationship can ultimately be located in different security discourses: frameworks of meaning with different conceptions of whose security is at stake; what threatens security; which actors are capable of or even responsible for providing security; and through what means." Thus, this perspective emphasizes how different articulations of environmental security have performative impacts on both the material and abstract contours of human-nature relations. For instance, environmental security narratives ranging from conflict-oriented appeals for heightened national security, human-centric concerns for those bearing the brunt of environmental change, cosmopolitan

messages about preserving international stability, to ecologically aligned visions for the ethical defense of all ecosystems each carry unique implications for the politics of decision-making surrounding both environmental and security issues.

In short, examining the political consequences of different conceptions of environmental security is necessary for understanding how environmental security as an emerging and contested idea mediates global responses to the multitude of ecological risks that now permeate transnational contexts. It is in this vein that this paper makes a key contribution by exploring how particular environmental security narratives leveraged by TNCs impact the politics of legitimation, and as a result, the allocation of authority over governing environmental risks.

## Global Environmental Governance and Critical Security Studies: Perspectives on Legitimacy and Power

Exploring how TNCs claim authority over transnational environmental security issues requires an understanding of both the power of security and the complexity of transnational governance arrangements. In this section, I review scholarship on legitimacy and power from the perspectives of global environmental governance and critical security studies. In doing so, I highlight how non-state actors generally negotiate legitimacy across transnational space through navigating governance gaps, promoting democratic norms, appealing to structural forces, and speaking to certain audiences. I then review the field of critical security studies to show how socially constructed notions of security intersect with power, authority, and governance. In the section that follows, I present a conceptual synthesis that outlines the unique tensions and questions that arise when considering the emergence of environmental security discourses among

non-state actors in the context of both global environmental governance and critical security studies

*Transnational Sources of Legitimacy*

The concept of legitimacy is helpful for understanding how non-state actors acquire, allocate, and contest authority across complex, transnational sites of global environmental governance. The purpose of this article is to analyze how TNCs attempt to achieve public acceptance of their rule and authority (legitimacy) by making normative arguments related to environmental security. Thus, in building a basis for this analysis, it is important examine how non-state actors generally claim authority over global issues, and to understand the different ways scholars have come to interpret and assess such claims. Legitimacy remains a concept that evades a universal definition, and therefore, different studies of legitimacy set forth a wide range of varying interpretations of its sources. After carefully reviewing the literature in chapter 2, however, I found four prominent themes that stood out as key conceptual categories on which many legitimacy claims are based: governance gaps, democratic principles, structure, and audience.

Much of the research, for instance, highlights how non-state actors gain legitimacy by filling "governance gaps" left by an inability or unwillingness of states to manage complicated environmental challenges. Thus, the growing prevalence of private actors in implementing, regulating, and monitoring governance activities can be attributed to the limits or failures of multilateral cooperation, especially regarding environmental challenges (Bäckstrand 2006). Non-state actors can earn legitimacy in response to such "governance gaps" by meeting "input" demands, which include increased procedural justice, inclusivity, and accountability related to

decision-making processes, or "output" demands such as the technical and knowledge-based ability to effectively address challenges over which they claim authority (Kalfagianni and Pattberg 2014; Bäckstrand 2006; Hurrell 2005).

Other scholars point to how non-state actors incorporate democratic practices and norms into their governing strategies to acquire legitimate status. At a broad level, this research speaks to the idea of "global democracy," and addresses whether and how democratic norms derived from state-centric institutions can fit a more dispersed global context (Erman and Uhlin 2010; Bexell 2014). Relatedly, other branches of the literature show how structural factors including but extending beyond democratic ideology— such as neoliberalism, patriarchy, or neo-colonialism— shape the allocation of legitimacy among non-state actors by informing discursive narratives about what or who certain political communities should perceive as legitimate (Scholte 2018).

Lastly, a growing number of legitimacy analysts focus on the intersubjective relationship between governing institutions and the communities who grant or contest their legitimacy. Audiences arguably play the most pivotal role in processes of legitimation given that legitimacy is often understood as a function of authority claims that are then interpreted, favorably or not, by relevant political subjects. (Gregoratti and Uhlin 2018; Bexell and Jönsson 2018).

Overall, governance gaps, democratic principles, structure, and audience provide relevant categories through which to examine the distinct ways environmental security concepts influence the legitimation of non-state actors. For this reason, I structure my analysis around these four categories to guide my interpretation of how environmental security serves as a source of legitimacy among TNCs.

*Power of Security*

The securitization of non-military threats poses a unique addition to the research on legitimacy detailed above, especially because the notion of security carries with it a distinct capacity to legitimize certain actors and ideas while delegitimizing others. The field of critical security studies attempts to analyze this "power of security" by investigating how security politics shape distinct social contexts. Therefore, this field provides a unique set of conceptual perspectives that, I contend, are necessary for understanding how environmental security discourses that now permeate throughout transnational political space influence the legitimacy of non-state actors.

Critical security scholars analyze the relationship between security and power from different perspectives. Some focus on potential for security discourses to justify extraordinary decision-making authority, as securitizing agents can frame almost anything as a security issue by describing it as an existential threat, thus asserting the need for extraordinary measures to contain or manage the issue, while relying on little, if any, democratic deliberation (Buzan et al. 1998). Advancing a more explicitly normative orientation toward security, others search for emancipatory potential in alternative meanings and approaches to security that are centered around human welfare rather than military warfare (Booth 2007). Embracing a sociological approach, others try to deconstruct the routinized politics of security that remain entangled with broader forces of governmentality, including diffuse security practices that take place under seemingly normal social conditions such as policing, or border control (Bigo 2016; Huysmans 2006). Lastly, working against the Western centrism of critical security studies, some scholars employ postcolonial or decolonial perspectives in order to expose how legacies of European

imperialism inform notions of security that perpetuate harmful depictions of the "other" and reinforce uneven conceptions of global authority and virtue (Barkawi and Laffey 2006).

One area yet to receive sufficient attention across critical security studies, however, is the role of non-state actors in molding and utilizing security discourses across de-territorialized, transnational space. While some scholars address security discourses within the context of globalization, the primary focus of such research remains largely concerned with state-sanctioned military or paramilitary configurations. For example, Bigo (2012) shows how globalized security discourses concerning terrorism, migration, and human trafficking define transnational "threats" in a way that extends authority to globalized networks of public and private security "experts" including police officers, border guards, and other intelligence officials – whose emergency politics and oppressive technologies are legitimized by globalized perceptions of risk. This paper, on the other hand, takes on a transnational perspective to account for the wider assemblage of actors beyond specialized security agents— including large-scale TNCs— who are engaging with and molding the meaning and practice of security, and specifically environmental security, as a contested concept.

**Conceptual Synthesis: Environmental Security as a Legitimating Discourse**

Considering both global environmental governance and critical security concepts in tandem reveals provocative conversations and tensions that emerge around four key aspects of legitimacy: 1) governance gaps, 2) democratic practices, 3) structural forces, and 4) audiences. In this section, I reflect on these four categories while synthesizing various insights on security, power, and authority as reviewed above. This conceptual synthesis serves as a guiding

foundational schema from which I examine how TNCs engage with environmental security as a legitimating discourse.

*Governance Gaps*

While some global environmental governance scholars examine questions of legitimacy in relation to the extent to which non-state actors are filling “governance gaps,” (Bäckstrand 2006) others who focus on security see the state as overbearing, rather than in a position of retreat (Buzan 1991; Booth 2007). This poses a unique tension in terms of how non-state actors might make claims about their legitimacy through security discourses. In one respect, states could indeed lack the wherewithal to sufficiently grapple with environmental security issues given the contradiction between environmental flows and bordering, opening up possibilities for non-state actors to describe themselves as “output” security providers in the face of this void. Alternatively, states might willingly outsource particular security issues such as environmental change in an effort to absolve themselves of responsibility, thus delegating greater authority to non-state actors to manage material ecologies while at the same time refining the political and ideological architect of neoliberal capitalism (Mayer and Phillips 2017). Here, a political economic lens concerning the privatization of certain responsibilities is crucial for understanding the governance “void.” The notion of “output” security also brings to the fore a critical tension concerning the relationships between non-state actors who are shaping environmental security discourses and the lingering or active influence of state-centric logic within such constructions of security. In the context of security-based legitimacy claims, it then becomes important to investigate the extent to which non-state actors rely on narratives in which states are steering

iron-handed security policies,  experiencing functional decline, or explicitly deferring to non-state actors to govern cross-border security challenges in the context of extractive capitalism.

*Democratic Principles*

A central concern for many critical security scholars is the tendency for securitization to preclude democratic deliberation, as security issues are often governed within elite and exclusive domains of decision-making (Buzan et al. 1998). Yet, much of the literature about non-state environmental actors highlights enhanced democratic participation as an essential source of legitimacy (Erman and Uhlin 2010; Bexell 2014). Thus, introducing environmental security as crucial facet of the politics of legitimation complicates the preoccupation with democratic credentials, and illuminates a tension between inclusive participation as a mainstay of environmental governance and the increasingly risk-based rhetoric leveraged among non-state actors, particularly TNCs in this case. This calls for further consideration of how security is related to the project of global democracy in either constraining or liberating ways. More specifically, it is necessary to assess whether conceptions of environmental security leveraged by non-state actors incorporate claims about democratic ideals or rather circumvent such democratic prospects by relying on emergency rhetoric as an alternative source of legitimacy.

*Structure*

Global environmental governance and critical security studies both deal with structural forces by examining the impact of meta-normative trends at various scales. This presents a particularly rich opportunity to synthesize such scholarly work to better understand how environmental security fits into the broader discursive structures of global politics. For example,

just as security scholars point to the connections between security discourses and the legitimation of status quo configurations of neoliberalism, so too do governance scholars highlight how neoliberal norms— which derive meaning and power through discourses centered around the instrumentalization of nature and commodification of value— influence the proliferation and acceptance of market-oriented approaches to environmental challenges (Bernstein 2011; Bartley 2007; Neocleous 2008). Both fields also examine how structural forces impact politics of inclusion and exclusion, interrogating issues such as uneven economic and environmental exchanges across North/South dimensions that in large part rely on the construction of knowledge formations that include articulations of the "other" as dangerous (Bierman and Patterberg 2008; Bigo 2008). Therefore, it is necessary to situate legitimacy claims advanced by non-sate actors within broader structures of meaning in order to understand whether such claims perpetuate or disrupt prevailing orders of environmental and security politics.

*Audience*

Audiences play a pivotal role in accepting, negotiating, or contesting the legitimacy of governance frameworks or broader social structures to which they are subject. As Bexell (2014, 297) argues, scholars of global governance should seek to "gain deeper understanding of how audiences are constituted through processes of legitimation and how legitimacy claims evolve over time in order to appeal to audiences other than international organizations' member state elites." In comparison, some critical security scholars advocate for a more comprehensive view of "audiences" as agential actors engaging with security politics from various perspectives and standpoints. For instance, Côte (2016, 543) argues that scholars should reimagine "the securitization audience as an active agent within an iterative and contextually situated

securitization process, capable of having an independent effect on securitization outcomes”. Thus, it is crucial to pay attention to whom TNCs are speaking when claiming authority over transnational environmental security issues. Moreover, such research should seek analyze the extent to which audiences take on agential roles in negotiating or contesting both claims of legitimacy and the trajectory of securitization more broadly.

**Methodology and Case Description**

In the remaining sections of this paper, I embrace an interpretive approach as I draw from the above conceptual framework to assess the legitimating influence of transnational, environmental security discourses . I specifically examine the legitimating qualities of environmental security discourses leveraged by BP, Nutrien, and Veolia— three TNCs that have a clear stake in global environmental governance as members of the World Business Council on Sustainable Development (WBCSD), and that also claim to mitigate socio-environmental risks driven by resource scarcities, natural disasters, conflict, the threat of climate change, and beyond. I focus on these three particular TNCs because they each indicate a desire to steer global architecture of environmental governance through their membership in the WBCSD and because they each operate across borders as well as across sectors. Thus, an analysis of how BP, Nutrien, and Veolia turn toward environmental security as a source of legitimacy can shed light on the ways non-state actors take advantage of and give meaning to environmental security as a global environmental governance discourse.

Due to the small nature of this case selection, the findings described below are not easily generalizable across all TNCs showing interest in environmental issues. However, a thorough interpretation of each case does provide a strong conceptual and empirical basis from which to

extend the academic debate about environmental security to include more profound assessments of TNCs as actors seriously engaged in the politics of environmental security. In terms of textual data, I rely on a close examination of each corporation's annual and sustainability reports, website content, and twitter accounts, and in doing so, apply critical discourse analysis to locate the ideas, concepts, and power relations that each corporation utilizes to give meaning to environmental security as a source of legitimacy. The following discussion begins by revealing the ways each corporation relies on and appeals to environmental security concepts in their broader environmental governance agendas.

Focusing on discourses leveraged by corporations operating across the FEW nexus brings to bear important aspects of the environmental security debate that have yet to gain notable recognition in the relevant literatures, namely, the ways non-state actors give meaning to the theory and practice of environmental security while organizing and "securing" the movement of resources across transnational space. Moreover, as I show in the following analysis, each TNC not only governs the movement of "resources" in their respective sectors, but also shapes and securitizes environmental issues that stretch across food, energy, and water nexus, thus influencing the governance and security of human-nature relations on a broad, global, and interconnected scale.

*BP*

BP has taken on a major, multi-level role in oil and gas production over the course of its 110 years in operation and remains one of the primary leaders in the global energy market. Headquartered in London and operating across almost 80 countries, BP moves an estimated 3.8 million barrels of oil per day (BP 2019 Annual Report). As a non-state actor with significant

influence over the trajectory of environmental change, BP has recently expanded its investments in "people and planet aims, including aspects such as sustainable livelihoods, community health and wellbeing, enhancements to local water catchments, and biodiversity, in support of community needs" (BP Sustainable Livelihoods 2020,2). Such matters also make up key concerns of the environmental security literature as outlined above, as scholars focus on the extent to which communities are able to meet their environmental needs, maintain sustainable livelihoods, and ensure health and well-being despite increasingly prevalent environmental risks.

BP's corporate social responsibility agenda is closely intertwined with discussions about environmental security. For instance, BP links human vulnerability and the environment under the language of risk mitigation, affirming that their review of "issues such as climate change, water, how we engage with communities and human rights. . . includes examining emerging risks and actions taken to mitigate them" (BP Sustainability Report 2015, 25). Moreover, BP explicitly highlights the dire consequences of intensifying resource scarcity by emphasizing "the importance of managing fresh water use and water discharges effectively in our operations and evaluate risks, including water scarcity, wastewater disposal and the long-term social and environmental pressures on local water resources" (BP Sustainability Report 2014, 43). BP also seeks to "help address global food security" by collaborating, for instance, with other corporations that are investing in aquaculture technologies (BP 2019). These authority claims expose BP's role in securitizing not only energy challenges, but a whole suit of interconnected issues that extend across borders and sectors within the FEW security nexus.

At the same time, BP employs a robust security program to protect its operations against an array of social and environmental threats. This particular mode of securitization is part of a broader trend in supply chain security, where corporations, states, and private security forces

coalesce across militarized networks built to secure transnational trade routes and corporate assets against people or events that might compromise such profit-making industries. Though primarily meant to safeguard commodities rather than cultivate images of social or environmental responsibility, such aspects of non-state governance are, I argue, increasingly relevant to debates about the intersection between environmental politics and security in that supply chain security mechanisms transform logics of authority and geopolitical space as they extend across "land sea, encountering and recasting the government of national borders" while colliding "with the rights and livelihoods of groups, reconstituting those groups in the process" (Cowen 2014, 12). Thus, non-state authority, security, and the governance of complex social ecologies are deeply entangled.

*Nutrien*

Nutrien is an industrial agricultural company headquartered in Canada that distributes over 25 million tons of fertilizer to customers worldwide (Nutrien 2021). Its leading representatives argue that Nutrien is "well positioned to make a meaningful contribution to many of the [sustainable development] goals, most notably the end of hunger and poverty, achieving food *security*, and promoting sustainable agriculture. . . by offering products and services that. . . impact the security of the world's food supply" (Nutrien 2021b) Thus, just as BP claims authority over mitigating vulnerabilities related to scarcity, well-being, resilience, and livelihoods, Nutrien claims responsibility over similar challenges but further positions their contributions within the broader aim of ensuring global food security. Nutrien's key purpose, for example, "as the world's largest provider of crop inputs, services and solutions" is to "feed the world's growing population" especially in the current global context where the "importance of

food security and agriculture's purpose to feed the world has never been more apparent and important" (Nutrien Annual Report 2020: 6) . Like BP, Nutrien also fortifies its supply chain in a militaristic fashion in order to protect its operations from "threats" ranging from extreme weather events to acts of terrorism.

It is important to note that Nutrien's current business structure and their influence over the agricultural sector is the result of a 2018 merger between two different companies— PotashCorp and Agrium—that specialized in producing and marketing industrial fertilizers including potash, nitrogen, and phosphate. Both predecessor corporations heavily informed Nutrien's environmental governance agenda and are therefore included in this project's analysis. Agrium, for example, passed on several ideas that overlap with influential environmental security concepts, including the protection of ecosystems upon which humans rely:

> Our world faces a number of complex environmental challenges. The earth's finite natural resources must feed a rapidly growing population through sustainable agricultural intensification—producing more food with fewer resources. Doing this sustainably means actively stewarding the nutrients in soil, while protecting its long-term health. It also means protecting biodiversity in our ecosystems, and limiting long-term negative impacts on the air and water. Other environmental imperatives include lowering GHGs and the protection of our vital water resources, which are essential to the survival of our environment, economy, and society (Agrium 2014 Sustainability Report, 37).

PotashCorp, on the other hand, brought to the merger an emphasis on philanthropic community engagement in the form of supporting "organizations and initiatives that improve quality of life"

by addressing challenges associated with “local and global food security” (Potash Stakeholder Report 2014, 23).

*Veolia*

Veolia, headquartered in France and also a member of the WBCSD, provides essential services including water, waste, and energy management for cities across the world. The history of Veolia’s involvement in resource management dates back to 1853, when a previous iteration of the corporation privatized water distribution in Lyon, France and then proceeded to obtain water management contracts in various cities across the globe, ultimately gaining control over a suit of environmental services under the megacorporation “Vivendi Environment” (Veolia Annual Report 2019). Currently, Veolia operates almost 10,000 water, waste, and energy sites across six continents, managing resources for approximately 100 million people on a transnational scale (Veolia Annual Report 2019). Of critical importance is how Veolia’s role in water resource management emerges in conjunction with claims that Veolia can provide security for people who come into contact with its services, particularly those who are increasingly prone to socio-ecological risks exacerbated by environmental change.

Veolia, for example, claims to serve a crucial role in mitigating environmental insecurities in a world plagued by limited access to essential resources, increasingly intense disasters, inequality, and conflict by leveraging technical invitations through which they have “developed a range of solutions to help clients adapt to climate change and improve their resilience, such as: water recycling and the reuse of wastewater to reduce pressure on natural resources and conflicting usages in areas exposed to water stress” (Veolia Annual Report 2018,

305). More broadly, Veolia situates its contributions to environmental security in the context of various risk-inducing global trends:

> Globalization, increasing urbanization and climate change create new risks for cities in the 21st century: natural disasters, migration, epidemics, resource conflict, etc. Urban areas, which are home to 55% of the global population and contribute to 80% of the world's GDP, are the engine of global growth - but they are also the most vulnerable to these new impacts and chronic stresses. Cities must therefore anticipate these risks in order to both ensure people have access to essential services and secure the economic, ecological and social functioning of their territory (Veolia 2021a).

To help address such challenges, Veolia mobilizes a group of volunteer responders called “Veoliaforce” to manage emergency situations such as natural disasters or climate-driven migration. At the same time, Veolia joins the likes of BP and Nutrien in employing strategic security tactics to ensure that their modes of privatization remain productive across transnational space.

**Results: Environmental Security as a Source of TNC Legitimacy**

In this section, I situate and analyze the discourses through which each corporation engages with environmental security, while paying particular attention to how such discourses are intertwined with processes of legitimation. This approach is important for understanding how environmental security debates impact authority, agency, and contestation both in theory and in practice. For instance, if environmental security issues transcend borders, as scholars often argue,

then what do such cross-border risks imply for cross-border governance? In other words, as the meaning of security shifts due to changing ecological conditions, how does the rhetoric of legitimacy (and responsibility) shift with it, and to what effect? In an attempt to address these questions, I explore environmental security discourses as leveraged by each TNC across four key themes outlined above: governance gaps, structure, democratic practices, and audience.

*Governance Gaps*

BP, Nutrien, and Veolia each engage with environmental security narratives in ways that inform ideas about who is responsible for cross-border security issues that extend beyond the confines of territorially bounded states. More specifically, each TNC, claims to fill an implied governance gap in the area of environmental risk mitigation. This corresponds with contemporary trends in output legitimacy in which non-state actors such as TNCs leverage the notion that they can help society overcome global challenges that states are not equipped to handle (Bäckstrand 2006).

In filling such gaps left by governmental inaction, each TNC indicates specific contributions in the form of spending, knowledge production, and the mobilization of on-the-ground responders and security diplomats across the globe. Such "outputs" contribute to the idea that these TNCs can respond to transnational risks more effectively than state-centric or multilateral regimes. Nutrien, for example, claims to have "added value" to society by spending over $80 million on food security in 2018 (Nutrien Sustainable Development Report 2018). In terms of knowledge production, Nutrien, Veolia, and BP advance certain understandings of environmental risk and vulnerability, whether through collaboration with research programs, providing particular interpretations of risk mitigation, or by promoting curated educational

campaigns. BP, for instance, initiated a "three-year policy programme at Harvard University's Kendy School focused on examining current and future potential policies on energy, security, and climate change" (BP Annual Report 2011, 74), while PotashCorp, one of the predecessors of Nutrien, boasted that their community speaking tours led to "40,402 youth informed about food security issues" (Potash Stakeholder Report 2014, 3). Lastly, these TNCs offer training in the area of security both in relation to human rights and environmental risk reduction (BP Sustainability Report 2011, 43) , and in other cases, send volunteer "units" to respond in the immediate aftermath of disasters, like when Veoliaforce was sent to Saint Martin and Saint Barthélemy in the wake of Hurricane Irma to implement "emergency solutions" including the provision of safe drinking water supplies (Veolia 2021b).

Such claims complicate the notion that securitization and militarization predominately heighten the authority of state-centric institutions (Buzan 2008). Instead, attempts on behalf of TNCs to legitimize their extractive operations by alleging to simultaneously provide effective security solutions show that non-state actors, too, have a stake in leveraging the political implications of securitization. The idea that corporations are part of and benefit from a world society governed by globalized security practices is not new. The particular mechanisms through which major TNCs leverage, disseminate, and govern security discourses on a global scale, however, remain largely unexplored in critical security scholarship. This empirical analysis, thus, shows how TNCs appeal to connections between output legitimacy and modern security issues suggesting that corporations not only hold economic power over global trade, finance, and resource privatization in a securitized world, but also rely on the politics of security to expand and maintain the continuity of their operations across transnational space.

*Democratic Principles*

The notion that non-state governing actors can or should promote democratic norms shapes much of the scholarly debate about legitimacy beyond the state. As globalization complicates traditional avenues of legitimation, non-state actors often invoke democratic ideals like deliberation, dialogue, transparency, and accountability to enhance their image and thus extend their authority across transnational political domains (Dingwerth 2007; Bexell 2014). In this case, I find that BP, Nutrien, and Veolia each position their environmental security narratives within the context of broader democratic norms including participation, inclusion, and solidarity. This implies that as TNCs leverage environmental security a source of legitimacy, the topic of security becomes more relevant to debates about what public participation, accountability— and to a certain extent, justice— should look like across transnational space.

BP, for example, focuses on the concept of participation and allegedly engages in dialogue with a wide range of actors through strategies like conducting surveys and interview to gauge public input regarding the impacts of BP's security programs on relevant communities. BP also supports stakeholder participation by encouraging advisory boards such as The Tangguh Independent Advisory Panel in Tangguh, Indonesia, to provide feedback on "issues such as security and human rights" (BP Sustainability Report 2015, 11). BP also holds community engagement events with affected stakeholders whose livelihoods are increasingly compromised by the environmental impacts of BP's operations, as in the case of indigenous Arctic whaling communities (BP Sustainability Report 2013, 39). These efforts affirm studies that suggest non-state actors can attempt to acquire legitimacy by providing opportunities for public participation that extend beyond traditional electoral politics (Bexell et. al 2010).

Nutrien, on the other hand, focuses on inclusivity and draws upon this particular democratic norm to suggest that it can effectively ensure global food security through appropriate political and technical mechanisms. Their mission not only includes “feeding the future safely and with integrity each day” but also aims to “champion diversity and inclusive growth in the agriculture industry” (Nutrien 2021 Sustainability Report, 5). Thus, Nutrien introduces themes relating to environmental justice and equity alongside their claims to offer secure access to food for a growing population. A key aspect of Nutrien’s social responsibility agenda, for instance, is to “support rural livelihoods and increase participation of underrepresented stakeholders in agriculture” (Nutrien Food Report 2020, 4). Nutrien’s role in merging inclusion and food security is detailed in the following statement by Nutrien’s President and Chief Executive Officer, Chuck Magro:

> The world is facing some of the biggest challenges it’s ever had to tackle, and we need to be an active leader to do our part. We can’t sit on the sidelines – there is a role for business to play in making a local and global difference. I can’t say we have all the answers today but, what I can say, is we are committed to digging deep into the big questions related to food security, climate, water, and diversity and inclusion. (Nutrien 2018 Sustainability Report, 3).

Attempting to achieve similar aims, Veolia relies on expressions of solidarity and contends that that its humanitarian development and emergency relief services “contribute to the common good” (Veolia Annual Report 2015, 311). Solidarity, in this context, involves “combatting insecurity and inequality by ensuring access to essential services for people without

a water supply, sanitation services or electricity" (Veolia Annual Report 2019, 354), financially supporting "solidarity-oriented" causes, or providing volunteers for community-based projects that enhance resilience in the face of challenging socio-ecological conditions (Veolia Annual Report 2015, 267). Moreover, Veolia refers to solidarity as the guiding principle under which they aim to contribute to Sustainable Development Goal number 6: ensuring access to water and sanitation for everyone by 2030, stating that it is "very urgent today that these inequalities are reduced to ensure permanent access to water services for all" (Veolia 2021c). This, solidarity in this case, also entails elements of distributive justice in relation to the unequal allocation of environmental risk.

Attempts to associate democratic ideals with the governance of environmental security issues by BP, Nutrien, and Veolia complicate the perspective that security discourses operate to enhance state power under politics of exception at the expense of democratization. Instead, the participation of non-state actors in global environmental governance can generate unique processes of legitimation that contain the conceptual space for security issues to emerge in conjunction with democratic ideals. In this case, environmental security poses distinctive cross-border challenges that TNCs claim to address effectively and democratically in an attempt to garner legitimacy across areas of governance that might otherwise fall under the purview of states.

*Structure*

Meta-normative trends shape contemporary sources of legitimacy by influencing perceptions of whether actors complement or uphold certain organizing principles of society. Thus, structural dynamics, such as the normalization of capitalism or patriarchy, for example,

inform the discursive modes through which actors attempt to legitimize their authority across sites of global governance. Importantly, however, structural dynamics are not fixed, but rather vary across trans-scalar spaces in which authority is derived and contested in relation to different versions of what "world society" means (Scholte 2018, 84). Here, I focus on how the "social-structural power of discourse" engenders "certain forms of meaning" and at the same time excludes "alternative understandings of the world" (Scholte 2018, 90). Specifically, I explore the broader discursive formations within which BP, Nutrien, and Veolia give meaning to environmental security as a source of legitimacy in ways the reify or produce particular power relations across transnational space

The structural discourse under which BP engages with environmental security issues, for example, serves to normalize a Western-centric notion of progress achieved by exponential economic growth and technological innovation. In this context, the need for economic growth—particularly in "developing countries"— serves as justification for BP's continual expansion into new geographies and communities as a necessary step toward "meeting energy demand" and raising "standards of living." BP has for a long time promulgated the narrative that resource rich countries require assistance in managing their assets, and that their operations in the global South help to ensure that resources are directed toward proper aims as "countries that are rich in natural resources such as oil and gas can use their resources for successful development rather than falling prey to mismanagement, corruption or other pitfalls (BP Annual Report 2011, 73). Following this logic, BP plays a central role in contributing to energy security, which in turn enhances economic development according to standards of market-based metrics:

> Our work helps countries around the world to grow their domestic energy supplies and boost their energy security. This in turn creates jobs, drives economic development and generates revenue for governments. The value we create can transform communities, even nations (BP Sustainability Report 2018, 42).

BP's position as an energy security provider is not removed from BP's role in advancing "sustainable livelihoods" nor is it unrelated to BP's private, militarized, security operations. In all of these spaces, BP engages with environmental security from the perspective of a transnational, profit-oriented company seeking to expand market access while retaining legitimate status as an arbiter of "successful" human-nature relations. This mode of governance is mutually constituted and informed by uneven North/South relations where power shapes the way humans "use" nature across global value chains, and where the impacts of commodification are distributed unevenly by modes of "ecologically unequal exchange," as states and corporations like BP extract and move resources from the global South for consumptive uses in the global North (Roberts and Parks 2009). Thus, BP's claims to protect biodiversity and people are bound up in broader, unequal patterns of resource extraction, yet BP utilizes the structural discourses of neoliberalism to situate its contributions to environmental security amid prevailing conceptions of "progress" and "development."

In a similar vein, the meta-narrative under which Nutrien claims to provide global food security largely rests upon the neo-Malthusian perspective that external planetary limits pose a threat to society, particularly as the global population continues to grow. In this view, Nutrien situates the issue of food security in the context of resource scarcity, suggesting that "with an anticipated global population of 10 billion by 2050, producing enough nutritious and accessible

food is expected to strain existing land and water resources" (Nutrien Sustainability Report 2020, 10). While it's important to recognize that hunger and food shortages pose significant risk to communities around the world, the idea that global population growth and dwindling natural resources are at the source of this issue is a long-standing deflection that justifies greater emphasis on market solutions at the expense of reckoning with the strategic political maneuvers that led to the expansion of industrial agriculture and the disruption of local food systems and food cultures across the world. As Moore (2015) suggests, this perspective is part of a broader governing matrix under which "Natural limits are, effectively, outside of history."

This particular understanding of nature also carries with it meanings attached to imperialism that portray industrial expansion and extraction as necessary steps for ensuring prosperity, and in this case, security, for the global South. Such tones are present in the following excerpt from Potash Corp's Annual Report:

> Rising world population, rapid economic growth in developing countries and the subsequent desire for more and better food form the foundation for our growth story. While it is a vital and positive change that more people across the globe are improving their diets, it creates a challenge for farmers. More food must be produced with the limited land and water resources available. The science of food production demonstrates that proper fertilization is necessary to feed a growing world, and this need drives the prospects for our business (Potash Annual Report 2010, 8).

While Veolia appeals to similar meta-narratives about population growth, progress, and scarcity, the predominant context in which Veolia positions its environmental security agenda is

one where disaster and crises abound. For example, Veolia frequently draws upon disaster narratives to legitimate their role in privatizing global resources by suggesting that their sophisticated management tools—in addition to their emergency response teams—provides stability in the face of chaos. Thus, language relating to crisis and conflict is common in Veolia's public-facing communications:

> Natural environment degradation and climate change are exacerbating the severity of droughts and associated famines and amplifying the violence of storms and floods. Rampant urbanization and the rapidly growing demographic in many developing countries are multiplying the dramatic consequences of these natural disasters, which directly affect 211 million people each year. According to the Office for the Coordination of Humanitarian Affairs, this amounts to five times the number of victims of armed conflicts, even though this figure has seen no decline (Veolia 2021d).

In other instances, Veolia's representatives detail the "terrifying" and "serious threat" of natural disasters and other environmental challenges, which are contributing to a "perpetual state of emergency" where the "boundary between an emergency verging on a permanent problem and development support is becoming increasingly porous" and thus, "searching for expertise, skills and innovation in the private sector has become a must" (Veolia 2021b).

*Audience*

The target audience of the above claims regarding government gaps, democratic practices, and global structures is presumably comprised of English-speaking, Western members

of civil society who are concerned about environmental change and the responsibility of powerful actors to help society avert and reverse patterns of socio-environmental degradation. BP, Nutrien, and Veolia, for example, address a range of actors in their public-facing communications including "socially responsible shareholders," governments, customers, communities, partners, employees, academics, other TNCs, and inter-governmental organizations, doing so in a way that speaks more generally "about" relations in the global South rather than directly to such stakeholders. This indicates that BP, Nutrien, and Veolia are attempting to generate a public image of responsibility that facilitates a wide reach of authority across elite domains of global environmental governance.

Despite the overwhelming influence of such elite audiences, there still exists recognition of a legitimacy crisis of sorts among communities in which each TNC operates, which could explain why topics relating to environmental security have become a more central feature of communications between BP, Nutrien, and Veolia and their audiences. Veolia, for instance, acknowledges that pressure on corporations to legitimize their operations has risen in the face of public scrutiny pertaining to water rights:

> Multinational companies' rights to operate have been called into question in various regions where there is competition over the use of natural resources. In Chile, for example, there has been significant public pressure on mining companies whose industrial activities could impact upon the use of local water resources. The need for these companies to be accepted by the local population has led them to adopt policies that promote environmental responsibility and find solutions that reduce their ecological footprint (Veolia 2015 Annual Report, 11).

This example illustrates how issues featured in environmental security debates such as access to water are increasingly relevant to TNCs and their attempts to acquire or retain a "social license to operate."

Still, BP, Nutrien, and Veolia attempt to depict the concerns of certain "self-appointed" audiences as irrelevant by nature of their disruptive or criminal behavior. Quite often, protestors and communities resisting against extractive operations are designated as "terrorists" or "criminals" by corporation, and face imprisonment or aggressive policing by both public and private security personnel (Gómez-Barris 2017). Such tactics were utilized in BP's attempts to address heightened levels of protest in 2019, during which they worked with police to avoid operational disruptions and applied "state-of-the-art technology to monitor evolving high-risk situations in real time" (BP Sustainability Report 2019, 40). Moreover, all three TNCs ambiguously refer to terrorists, criminals, or pirates as threats to the continuity of their operations on a regular basis. While serious instances of violence and conflict certainly pose risks to essential infrastructures and industry employees, these labels are also tied to histories of colonialism and patterns of resource conquest, the contours of which still inform the current social and geographical landscape of extractive industries. Thus, understanding how environmental security is intertwined with processes of legitimation (and de-legitimation) requires more insight into how TNCs might utilize this language to invalidate certain audiences that pose alternative or opposing perspectives about the role extractive industries play in producing environmental (in)security.

## Conclusion

This chapter explores connections across environmental security, legitimacy, and global environmental governance. In doing so, I show how TNCs incorporate environmental security concepts into their discursive legitimation strategies. The key aim of this study is to highlight how authority over environmental security issues is negotiated across transnational space and among non-state actors in unique ways. The results further complicate traditional, state-centric notions of security and at the same time provide new insights into how non-state actors can acquire legitimacy amid intensifying pressure to respond environmental challenges.

To guide this analysis, I put forth a conceptual synthesis based on four prominent themes that stand out across the literature on non-state legitimacy: governance gaps, democratic principles, structure, and audience. This conceptual synthesis serves as a framework through which I asses the relationship between legitimacy and environmental security within TNC discourses. Specifically, I find that TNCs claim authority over environmental security within the functional context of output legitimacy (Kalfagianni and Pattberg 2014), ostensibly taking ownership over such responsibilities due their superior know-how and advantageous assets. I then expose a tension between democratic principles and the emergency decision-making rhetoric often associated with security (Buzan et al. 1998), as BP, Veolia, and Nutrien allege to pair democratic procedures with environmental security measures. Simultaneously, each TNC ties their legitimacy claims to meta-narratives that perpetuate imperialist and instrumentalist relationships with world society and nature, relying on the promise of corporate expansion to promote “progress” in the developing world. Lastly the audience of such claims is arguably comprised of an elite, Western class concerned with the voluntary reduction of socio-environmental harms as well as obscured but resistant subjects who are characterized in criminalizing terms.

Overall, this conceptual synthesis proves useful exposing the discursive mechanisms through which environmental security discourses operate in tandem with legitimating narratives. Future projects might draw from these four conceptual categories to assess interactions between security and legitimacy in other non-state contexts. This could help to expand critical security studies to include more nuanced assessments of the operational and theoretical impacts of securitization, especially as security discourses proliferate among a wide range of political spaces with profound implications for legitimacy, power, authority, and contestation. More specifically, this conceptual synthesis can aid critical security scholars in locating the complex and fluid legitimating qualities of a securitized discourses, rather than relying on fixed assumptions of security that are based on theories of exception or state-centric behavior (Agamben 2005). For example, though the convergence between democratic principles and environmental security within TNC discourses arguably serves to cast a veneer over profit-oriented motives, scholars might use this framework to explore whether connections between security and democratic norms permeate other transnational, non-state spaces where attempts to legitimize a liberatory agenda are at stake.

At a broader level, the notion that environmental security concepts influence legitimation processes among TNCs carries with it major implications for understanding contemporary trends in global environmental governance. First, while long-standing debates about the declining role of the state continue to inform research on global environmental governance (Falkner 2003; Biermann et al. 2009 ), this analysis points toward environmental security as a crucial variable in shaping which actors are positioned to fill such voids and how. For example, as public-facing messages produced by  BP, Veolia, and Nutrien suggest, TNCs can capitalize on environmental crisis to assert their authority over domains of politics that are traditionally associated with

states, such as security. This raises dire questions about accountability. If TNCs claim authority over the politics of environmental security, what kind of mechanisms are available for those facing environmental insecurities to hold TNCs to account? This is a particularly important consideration in the context of outsourcing, in which discourses linking TNCs and security might lend legitimacy to the retreat of the state in the face of heighted calls for justice and accountability amid environmental catastrophes. This leads to the question of whose security matters in governance arrangements that privilege profit oriented TNCs as arbiters of such concerns?

Lastly, the results of this analysis further justify embracing a political economic perspective when conducting research on environmental security and global environmental governance more broadly. TNCs operating across borders not only direct the material flow of nature but depend upon certain legitimizing discourses that articulate both nature and world society in self-serving terms. Therefore, this chapter begins to address how uneven political economic relationships that underpin global environmental governance arrangements are in part justified by certain environmental security narratives— which are then leveraged by TNCs that both drive and claim to reduce socio-ecological risks across borders. Moving forward, future research can apply a political economic perspective to identify the empirical effects of environmental security narratives on perceived legitimation or delegitimization of increasingly hazardous global extractive practices. In the chapter that follows, I present a counter narrative to the legitimation of TNCs as providers of environmental security while digging deeper into what environmental security means in alternative settings where actors are struggling against the privatization of FEW nexus resources, in this case water.

# CHAPTER 6. ENVIRONMENTAL SECURITY: COUNTER-NARRATIVES FROM THE PERSPECTIVE OF STRUGGLE

As the previous chapters in this dissertation suggest, environmental security has evolved in recent decades into a compelling and provocative concept that, on the one hand, attempts to capture the gravity and urgency of our current planetary crisis, and on the other, carries significant political implications for the structure and practice of global environmental governance. Increasingly dire connections between environmental issues and security are at this point widely recognized, debated, and influenced by many different actors including states, intergovernmental organizations, NGOs, and even transnational corporations. Securitization processes initiated by these actors rely on discursive mechanisms that utilize threat narratives that can legitimize or delegitimize certain political responses and actors, shaping the way environmental and security problems are dealt with globally. While research on the construction and implications of top-down security narratives has recently expanded to reveal the myriad processes through which securitization impacts power dynamics, global governance, or mechanisms of governmentality, much less attention has been given to the emergence of bottom-up security narratives and their implications. This chapter, therefore, attempts to understand how the securitization of environmental issues among sites of resistance influences global environmental politics, and whether counter narratives about environmental security challenge the legitimacy of corporate actors as agents of security across the FEW security nexus.

Currently, scholarly debates about securitization and the environment mostly revolve around several key conversations about the political consequences of articulating threats and referent objects in distinct ways. Some scholars focus on whether environmental security discourses

safeguard states, capitalism, global institutions, humans, or the environment, and to what extent and effect (Detraz 2012: Swatuk 2014; Macdonald 2012). Others debate whether securitizing a particular environmental issue, such as climate change or water scarcity, is likely to engender competitive, conflict-oriented responses or more cooperative, peacebuilding strategies (Conca and Dabelko 2002). Taking securitization to task from a more critical perspective, others expose how security narratives, more often than not, serve to reinforce status quo ecological arrangements and perpetuate exploitative and destructive relations between humans and nature (Dalby 2017; Leese and Meich 2015). This chapter aims to contribute to such conversations by bringing into view the securitization of environmental issues across transnational sites of resistance. In doing so, I show how the range of environmental security discourses permeating global environmental politics includes counter-narratives about what environmental security means in the context of struggle.

More specifically, I look to the Our Water Our Right campaign— a transnational resistance movement against water privatization— as a case in which counter-discourses shape the meaning of environment-security connections. Drawing from an emancipatory lens associated with the Welsh school (Booth 2007), I embrace the notion that the politics of security can potentially serve liberatory objectives for both humans and the planetary systems of which humans are a part. At the same time, I endorse a context-dependent approach that views securitization as a process that unfolds differently across distinct spaces, and therefore, resist attaching fixed, transhistorical attributes to "security" such as totalizing logics of either emancipation or exceptionalism (Browning and McDonald 2011). Rather, the purpose of this chapter is to problematize linear interpretations of the speaker-audience relationship associated with traditional securitization theories by investigating the inter-subjective and contested processes

through which security gains meaning and importance in relation to environmental problems. In the previous chapter,  I identify Veolia as a "speaker" of securitization. Traditionally, residents of the cities in which Veolia operates might have been considered passive audiences to Veolia's attempt to enact or claim emergency powers through security logic. This chapter, however, turns toward the Our Water Our Right movement as an active, self-appointed "audience" composed of transnational subjects-in-resistance who pose counter-claims to Veolia's environmental security narrative and initiate alternative securitization processes that give meaning to environmental security from a counter-hegemonic perspective.

In the following section, I begin by drawing insight from critical security perspectives that suggest that counterclaims, struggle, and contestation significantly shape the way security functions as a legitimating or delegitimating concept. Next, I review the research on environmental conflict and land defense and argue that such sites of struggle can generate distinct processes of securitization that challenge traditional ideas about who can "successfully" securitize what, how, and for whom. I then present the Our Water Our Right campaign as a case in which securitization emerges as a discursive mechanism through which various groups resist water privatization and attempt to delegitimize actors behind corporate management schemes, including Veolia. I find that the Our Water Our Right movement positions privatization as the primary threat to water rights, which necessitates the protection of public services driven by state governments and the expansion of democratic participation. I conclude by discussing the implications of this threat narrative for both securitization theory and the potential transformative capacities of alterative security discourses. Ultimately, I argue that this case study introduces new ways to think through securitization processes in relation to the role of the state, the politics of crisis, and the agonisms that stem from sites of struggle.

## From a Passive Audience to the Politics of Struggle

Traditionally, the securitization theory associated with the Copenhagen School involves a linear depiction of the relationship between the securitizing agent and the audience to whom they are speaking, in which case "acceptance" of securitization rests mostly on a securitization agent arguing that an issue is a security problem (Buzan et al. 1998; see also chapter 2). This has given rise to numerous critiques of securitization theory for projecting Western-centric and imperialist renderings of security in which Western locutionary actors silence or dismiss the "vulnerable" subjects about whom they are speaking (Bertrand 2018; Howell and Richter-Montpetit 2020). Recently, however, the role of audiences has received more prominent notice in securitization studies, and many scholars have sought to extend, challenge, or altogether re-formulate securitization theory as it was traditionally conceived more than two decades ago. As Floyd (2020, 228) argues, explorations of the connections between the environment and security have particularly enhanced theories of securitization by improving insight into mutually constituted processes of securitization and enabling analysists "to see the interests of various stakeholders more clearly."

Such efforts to problematize simplistic renderings of audience relations point to the inter-subjective, negotiated, and ultimately political aspects of security as a contested concept. For example, Rothe (2016) shows how meaning attributed to climate security in the global arena is generated by tracing various levels of communicative interaction across spaces like the UN, the UK, and the Euro-Mediterranean region. Alternatively, Brauch (2009) points to opinion polls as an effective way to understand whether and how climate change is considered a threat globally, and others expose how mutual meaning is generated across different audiences including

communities of states, electorates, or the global public more broadly (Floyd 2010, Oels 2012). As McDonald (2010) puts it, environmental securitization processes involve intersubjective attempts to negotiate the meaning of "security" as it relates to various political communities' core values and ambitions, and such processes have the capacity to contribute to transformative political change in either emancipatory or regressive directions, depending on the context.

This chapter seeks to extend the current research on the contextual and contested constructions of "environmental security" by adding an emphasis on transnational social movements as important spaces in which subjects-in-resistance act as audiences to and generators of securitization processes. In doing so, I embrace McDonald's (2010,7) perspective that "security is best understood as a social construction" that "means different things to different political communities at different times." At the same time, I draw from other areas of critical security studies that foreground the connections between contestation and security as fundamental to the politics of risk, well-being, and justice. In this regard, I seek to take up Aradua's (2018, 301) call for scholars to push the "analysis of security practices in the direction of disputes, controversies and struggles" while considering the pervasive socio-political relationships that constitute one's experience of humanity in a power-laden world. This is also in line with Tulumello's (2018) provocation to avoid Western/liberal interpretations of security as an either absolute or individual condition, but rather a collective endeavor always subject to politicization and agonism. Thus, I build upon this literature to show how the Our Water Our Right coalition contests, challenges, and struggles against exploitative environmental practices while introducing a particular conception of security that stands in opposition to status quo arrangements of global environmental governance.

**Environmental Contestation**

Contestation involving communities struggling to cope with environmental change is an important area of focus across environmental security studies. A large portion of the literature on environmental security, for instance, is devoted to debates about the causal connections between environmental change and conflict and the propensity for dwindling resources to incite conflictual or cooperative relations between competing parties (Klare 2001). This branch of scholarship seeks to address concerns about violent competition over valuable resources, and is often tied to (or responding to) militaristic narratives about sub-state infighting resulting from the "threat multiplier" of environmental change. Elsewhere, however, scholars aim to shed light on types of conflict that generally receive less attention in mainstream discussions about environmental security— those which are connected to exploitative environmental practices driven by corporate or state elites.

Rather than relying on neo-Malthusian predictions of inevitable competition over scarce resources, studies of extractive-driven forms of contestation often emphasize how broader political ecological and historical dynamics drive environmental conflicts. Such scholars draw connections between material environments, socio-economic structures, converging histories of development, and systemic inequalities to interrogate how uneven power relations can shape "violent ecologies" (Robbins 2004). In this respect, "conflicts are rarely, if ever, solely about extractive resources themselves" (Le Billon 2022, 47) but instead pertain to grievances over particular regulatory arrangements, the unfair allocation of environmental risk, or limited accountability among state and corporate actors. In such contexts, violence can emerge in physical, structural, slow, or cultural forms and contestation against exploitative processes can

range from nonviolent protest, litigation, to armed resistance (Blaser 2016; Nixon 201;Le Billon 2013).

From a global perspective, actors engaging in contestation against extractive practices are often grappling with systemic dynamics of uneven ecological exchange. Conflict, in this sense, is not an apolitical, isolated event driven by measurable causal mechanisms, but instead, a collective struggle to negotiate contested visions of fair or just environmental relationships. As Le Billon (2022, 47) suggests, environmental conflicts "should not be considered as always negative and destructive, rather they can constitute emancipatory struggles challenging deep-seated environmental injustice." Sometimes labeled "environmental defenders," communities in resistance seek to protect local land, resources, and livelihoods against exploitative practices such as land occupation, pollution, or privatization (Unrah 2018; Le Billon 2018). Their efforts, however, are frequently met with criminalization and violent repression led by states or corporations, and indigenous communities in resistance are particularly exposed to repressive measures (Scheidel et al. 2020). According to Middeldorp and Le Billon (2019), over 1,500 people were killed from 2002-2017 as result of defending their land, while widespread state and corporate impunity makes it difficult to legally assign responsibility for these acts of violence. Therefore, those engaging in environmental conflict often rely on alliances with larger social movements through which they can leverage media coverage and transnational solidarity networks against risks of violent subjugation (Condé 2017). This also enables subjects-in-resistance to situate their struggles in the broader fight against global, exploitative systems that increasingly compromise many different communities' environmental rights and values.

The primary aim of this chapter is to understand how security is conceptualized across these sites of environmental contestation, and to explore how such sites of contestation influence

the legitimating qualities of securitization within the broader domain of global environmental governance. Although critical scholars have interrogated various top-down environmental security discourses that either misapprehend or justify environmental violence—such as crisis narratives that emphasize population growth or resource scarcity— these studies remain concerned with the implications of global elites acting as primary discursive agents (Peluso and Watts 2001; Le Billon 2015; Kallis 2019). While understanding how traditionally powerful actors leverage crisis narratives is important for detangling modes of governmentality and processes of legitimation and de-legitimation (as I highlight in previous chapters), this specific case study intends to investigate how securitized environmental discourses operate from a counter-hegemonic, rather than top-down, perspective. Other bottom-up analyses of environmental contestation have brought important attention to local peacebuilding strategies and alterative worldviews that challenge exploitative ideologies (Martinez-Alier et al. 2010; Ide et al. 2021; Adebunmi Aluko 2019). This project, though, seeks to retain an explicit focus on the potential for counter *modes of securitization* within sites of struggle and focuses specifically on the meaning and construction of discursive security-environment connections. Thus, in the following analysis of the Our Water Our Right movement, I turn again to McDonald's (2011) framework for understanding how securitization operates in distinct ways across different contexts, which draws on four key questions: (1) What is the nature of the threat? (2) Whose security is at stake? (3) What are the suggested responses? (4) Who are the agents of security?

**Case Selection: Our Water Our Right**

The Our Water Our Right (OWOR) movement was initiated in 2014 by a group called Environmental Rights Action (ERA) Nigeria in response to city officials in Lagos laying out

plans to privatize water resources under the direction of the World Bank. Since 2020, ERA has operated under a new title, Corporate Accountability and Public Participation Africa (CAPPA), with a core mission to "advance human rights, challenge corporate abuse of natural resources and build community power for inclusive development and participatory governance" (CAPPA 2021). Due to recent efforts on behalf of CAPPA, the OWOR movement has gained global recognition as a generative, transnational, anti-privatization movement, transcending borders to form coalitions across cities ranging from Lagos, Nigeria to Pittsburgh, PA (Shroering 2021). The OWOR campaign is primarily driven by collaborative interactions across West, Central, East, and Southern Africa among labor organizations, various NGOs, and other environmental activists advocating for global water justice. According to CAPPA, OWOR recognizes "privatization as one of the biggest threats to the realization of the human right to water on the continent of Africa" (CAPPA 2021). Thus, OWOR serves as a particularly relevant case in which subjects-in-resistance collectively challenge prevailing security discourses that position private actors as agents of security, and at the same time, advance a counter-narrative about the meaning of security in relation to environmental challenges.

The focus on privatization within the OWOR movement is consistent with privatization becoming an increasingly important focal point of environmental conflicts across the globe. Sometimes characterized as "distribution conflicts," movements against privatization call into question the power dynamics that impact unequal access to healthy water in cities (Asthana 2010; Langman 2002). Struggles against commodification of water resources contend with prevailing capitalist logics that perpetuate the idea that private actors are better equipped to manage resources more efficiently. While privatization impacts a wide range of sectors, researchers have found that resistance movements against water privatization constitute the

majority of anti-commodification struggles globally, arguably because water is such an essential biological and social requirement for human flourishing (Almeida 2014; Subramaniam 2014). According to OWOR advocates, particular drawbacks of privatized water systems include higher costs, limited accountability, poor customer service, loss of employment, and public health risks (African Center for Advocacy 2019; CAPPA 2021a). OWOR, therefore, works to stem the tide of privatization by opposing new contracts, supporting public management, and raising awareness about the failures of privatization schemes in cities across the world.

One of the key objectives of OWOR is to expose ties between the various state and non-state actors that negotiate water privatization plans with limited accountability, transparency and community input. Veolia, for instance, is frequently cited by OWOR as a key player in such transactions given its role as one of the most pervasive and wide-reaching private corporations negotiating water contracts through multi-million-dollar transactions with municipalities. Growing as one of the world's largest private water companies, Veolia recently acquired 29.9% of Suez shares— one of the other largest transnational corporations behind water privatization— and has announced plans to continue absorbing Suez almost entirely to ensure its competitive standing in the global water market (Veolia 2020). Veolia lies at the center of privatization scandals across numerous cities and countries globally including Gabon, Kenya, Pittsburgh, Flint, and even Paris— where the corporation is headquartered. Most alleged failures of Veolia's management revolve around toxic pollution from lead, benzene, or ammonia; poor infrastructure upkeep; facility shutdowns; job losses; heightened costs; and reduced access (CAPPA 2021a; Zangh et al. 2018; Shroering 2021) Despite such shortfalls, Veolia often walks away from failed contracts with profits gained and limited accountability for damage levied against communities. Veolia is in the running for a prospective public-private-partnership with Lagos, Nigeria. In

response, the OWOR campaign has mobilized to prevent such deals from moving forward, successfully influencing city officials to abandon or postpone privatization plans on several occasions. Thus, OWOR presents an opportunity for understanding both how Veolia's environmental security legitimacy claims are contested and how transnational social movements conceptualize security in their struggles against particular environmental governance arrangements.

In the following section, I analyze how the OWOR movement conceptualizes security in their campaign for water justice. In doing so, I draw upon McDonald's (2011) framework for interpreting security discourse across different contexts by asking: What is the nature of the threat? Whose security is at stake? What are the suggested responses? And who are the agents of security? I rely on textual data for this analysis published from 2015-present, including website content and social media reports published by CAPPA (and formerly ERA), media coverage of the OWOR campaign, and reports issued at the culmination of two transnational mobilization events: "Africa Week of Action Against Water Privatization" in 2021 and "Nigeria's Water Emergency: From Resistance to Real Solutions Against Corporate Control" in 2019. As in previous chapters, I embrace a critical discourse analytic approach that investigates how meaning is created through communicative interaction, while remaining attuned to the power dynamics that imbue political communication with certain values, priorities, and visions (Graham 2005). Ultimately, I seek to provide insight into the construction and performativity of security as conceptualized by the OWOR movement.

## Analysis and Discussion

In this section, I detail the results of my discourse analytical exploration of the OWOR movement. I find that OWOR actors turn toward securitization processes in their public communication efforts to strategically position privatization as the primary threat, the human right to water as that which is at risk, and remunicipalization of water systems as the appropriate response. Consequently, the OWOR movement views governments as key agents of security, but also advocates for the importance of democratic participation for eliciting a mutually contingent relationship between government control over life-giving resources and "the people" who depend upon such resources. In this regard, OWOR activists delegitimize corporate authority and instead leverage environmental securitization against the "shrinking of the state," while also maintaining their agency over steering governmental action and holding the state accountable.

*What is the nature of the threat?*

Privatization, as previously detailed, is the main concern of the OWOR campaign. What is relevant for the purposes of this chapter, however, is the extent to which privatization is associated with a particular security narrative. In this regard, privatization stands out as the first and foremost threat against which OWOR is struggling, and their campaign against privatization is frequently described in securitized terms. In calling attention to the pervasive dangers posed by privatization, for instance, the Executive Director of CAPPA argues that "no matter where you are from on this content, the threat of water privatization is real" (Abade 2021). An environmental engineer from Senegal associated with the OWOR campaign working to generate solidarity with Lagos echoes this concern, and argues that "Suez's control of our water system is a threat to the future of Senegalese people. Water must be a public resource, not a privatized commodity." (Abade 2021). Drawing on more starkly securitized language, the report issued as a

result of OWOR's Africa Week of Action Against Water Privatization titled "Africa must Rise and Resist Water Privatization" begins by stating:

> Africa is under the siege of multinational private water corporations. Public water systems in the majority of countries across the continent are facing disturbing levels of privatization pressures, creating an urgent need for broad-based civic actions to expose and challenge these threats (CAPPA 2021a, 2).

This language explicitly links the actions of private actors to strategies of war, likening their involvement in the affairs of water management to a "siege," the looming encroachment of which requires urgent resistance among civil society. The particular risks posed by this threat of privatization against which OWOR is fighting include increased water costs, loss of jobs, poor water quality, and limited accountability among state and corporate elites, the culmination of which arguably exacerbates "existing water crises and inequities" (CAPPA 2021a, 6).

Interestingly, OWOR avoids describing the water crisis in terms of scarcity, drought, or limited availability of water itself, which is the prevailing narrative across FEW security nexus documents (see chapter 4) and also a driving force of "crisis" featured heavily in TNC legitimacy claims over environmental security (see chapter 5). Instead, OWOR claims that water shortages are driven primarily by a failure on the behalf of governments to allocate funds toward infrastructure maintenance, paying waterworks employees, and managing water governance systems more generally. In this context, privatization would worsen the scenario in places like Lagos, where "90 per cent of the city's 21 million residents lack daily access to safe water" by lessening resolve among government actors, who instead, would allow private corporations to prioritize profit rather than improving water infrastructures (Oluwafemi and Naficy 2015, 1).

Thus, in CAPPA's call for government officials of Lagos to declare a "state of emergency" due to the water crisis, they are primarily concerned about the potential for privatization to reduce investment in community waterworks facilities even further. Their efforts to empower communities to fight for water justice accentuate this point:

> Our message remained focused on letting them know and understand why they do not have water, chiefly among which is government's lack of investment in the water sector to pave way to handing the few existing water infrastructure to privatizers (CAPPA 2020, 10).

It is important to note that instead of water "scarcity," coding reveals that the OWOR movement often links the threat of privatization to the risk of worsening water "shortages" or "deficits," which are attributable to subjective human decision-making rather than an innate quality of nature. This indicates the possibility for OWOR's security narrative to challenge the securitization strategies of corporations and to reorient dominant, neo-Malthusian discourses that view scarcity as the underlying threat toward a perspective of environmental security that centers the politics of access.

In terms of the particular subjects enacting political pressure, the OWOR campaign exposes Veolia as a key actor behind the proliferation of privatization schemes that threaten to strip municipalities of their public funding and skew values toward profit rather than the right to water. The OWOR movement insists, for example, that though water is a fundamental right, "giant corporations like Veolia and Suez, backed by international financial institutions like the World Bank are exploiting this basic need by trying to privatize water across the African

continent, threatening to leave millions of people suffering without water" (Abade 2021, 2)). Veolia's market-centric motives make this risk particularly urgent especially because, as OWOR frequently points out, Veolia's intentions are to increase profits rather than dedicate funds to bettering essential infrastructures. These dynamics are precisely, then, what leads to the prevalence of shutdowns and pollution hazards "threatening permanent harm to residents' health" (CAPPA 2021a, 7). In this regard, OWOR stands in opposition to Veolia's claim to safeguard residents from environmental catastrophe as discussed in the previous chapter.

Lastly, the threat of privatization as conceptualized by OWOR is deeply intertwined with neo-colonial governance arrangements that perpetuate unequal relations between the global North and global South. As activists contend, Veolia, backed by the World Bank and IMF, is targeting the Middle East and Africa as prime areas in which to expand their corporate control over water,  following a trend in which "multibillion-dollar corporations and their wealthy shareholders, mostly based in the Global North, have made riches from privatizing community water systems across the globe" (CAPPA 2021a, 6)). According to OWOR, the World Bank is particularly responsible for pushing privatization onto countries in the global South through their International Finance Corporation (IFC), which has previously invested in Veolia subsidiaries. In this context, the OWOR argues that for three decades "World Bank policies promoting the corporatization and privatization of our water supplies have long threatened the human right to water" (Oluwafemi and Naficy 2015, 1), and instead of increasing public funds for ensuring access to water, the World Bank has orchestrated a "regulatory environment amenable to privatization through PPPs," placing it "at the forefront of the privatization threat" CAPPA 2021a, 14).

With such systemic inequalities in mind, the OWOR campaign formally stated that "the corporate takeover of water in Lagos and other cities across Africa is a new form of colonialism now strangulating the African continent" during the "Nigeria's Water Emergency" summit. (CAPPA 2019, 1). Moreover, Dr. Melia Abdulla, representing the Black Lives Matter movement at the "Africa Week of Action" event in 2021, declared that "the idea that water could be privately owned is a white supremacist notion" (Abade 2021, 4), further linking the fight against privatization to world systems of oppression. Thus, in drawing connections between colonialism, resource management, and racial inequities, those shaping the OWOR discourse situate the threat of privatization within broader political struggles against historically unequal arrangements of ecological governance. This exemplifies an instance in which contestation against exploitative arrangements can take on generative and emancipatory aims (Le Billon 2022) by reformulating the terms through which environmental "threats" are understood.

*What or Whose security is at stake?*

The OWOR movement views privatization as a threat to the human right to water. This narrative draws upon distinct connections between human rights and security, which arguably serve to facilitate dialogue across a broad spectrum of organizations and activists seeking to contest exploitative practices driven by states and intergovernmental organizations who have publicly declared commitments to upholding human rights. Thus, narratives about the threat to human rights posed by water privatization are imbued with an agonistic call for such organizations to either uphold their responsibilities or otherwise resign to committing a stark, contradictory injustice. As the OWOR coalition argues, "privatization has become the most potent threat to Africans' human right to water" and "when this human right [to water] is not

fulfilled and protected, people pay the price. People pay with their health, women and girls pay by sacrificing a formal education in order to procure water, and people even pay with their lives" (CAPPA 2021a, 6).

Within this human rights discourse, OWOR highlights how the risks posed by privatization are not distributed evenly, but at the same time, focuses on a collective need for and relationship to water that serves as a uniting force in the struggle for water justice. For example, gender and class are featured prominently as variables that influence the extent to which people will suffer from the effects of privatization, and the OWOR campaign remains sensitive to the struggles of "the most vulnerable." (CAPPA 2019b; Adediran 2). Additionally, however, OWOR activists and spokespersons frequently invoke chains of commonality by using terms that capture a unity of experience, describing those whose security is most at stake as "the masses" "Lagosians," "Nigerians," "Cameroonians," "Senegalese, "Africans," "workers," and "millions of people." As one attendee of the "Africa Week of Action" put it, "everyone needs water to live" (Abade 2021, 7). Such statements and descriptors indicate that the OWOR movement is attuned to both the differential exposure to risks posed by privatization as well as the importance of access to safe water for the flourishing of society more broadly.

This common but differentiated narrative of risk stands in contrast to much of the environmental security and conflict literature which emphasizes the likelihood for water crises to result in conflict among competing parties, especially at the sub-state level (Homer-Dixon 1991). Moreover, the simultaneous emphasis on collectivity and difference evades the absolutism trap wherein top-down security discourses often homogenize subjects of insecurity as powerless and vulnerable (Bertrand 2018). Rather, OWOR's discourse of security, safety, and well-being challenges the binary between self-interest and absolutism and diminishes the "othering" effect

of vulnerability by highlighting relations of solidarity with those who are most at risk. This tension between vulnerability and solidarity politicizes the meaning of security in relation to the broader structural forces that perpetuate the risk of privatization, thus invoking a process similar to Tulumello's (2018) vision of agnostic security, in which the struggle for security involves dislocated negotiations about a common dignity of becoming. Thus, the issue of privatization, for OWOR, touches upon the core meaning of political relationships between humans and nature, as one message of solidary puts it 'if water is life, then, the commodification of water amounts to the commodification of life" (CAPPA 2021b).

*What should responses look like?*

OWOR argues that the reprioritization of values, the reallocation of funding, and enhanced democratic participation across local governments is necessary for safeguarding the human right to water against the threat of privatization. OWOR demands, for example, that local governments "reject all forms of corporate control of water" and instead "respect, protect, and fulfill the human right to water for all people by prioritizing robust public investment" (CAPPA 2021a, 16). In terms of funding, OWOR argues that state governments can effectively reallocate funding if prospects of privatization cease to impede more meaningful public investment decisions, as negotiations with corporations stand "in the way of states' ability to raise the tax revenue necessary to invest in essential services" (CAPPA 2021a, 17). Thus they call upon both governments and corporations to "stop all attempts to privatize Africa's water systems, including through so-called 'public-private partnerships,' as they are a direct threat to our human right to water" (CAPPA 2021a, 17). In Lagos, for example, OWOR argues that detangling private from public interests would allow the Lagos State Government to: "build the political will to prioritize

water for citizens, leading to a comprehensive plan that invests in water infrastructure necessary to provide universal water access, jobs, improved public health, and invigoration of the Lagos economy” CAPPA 2021c, 10).

In Lagos, OWOR’s efforts revolve around *maintaining* and improving public control over water management, while repeatedly contesting and warding off privatization plans. In justifying their response to prospective public-private negotiations, they draw upon contemporary global trends toward the “remunicipalization” or “renationalization” of water sectors as evidence to suggest corporate failures and government re-appropriation of water systems is increasingly the norm across sites of contestation. In this regard, “the accelerating campaign in Lagos is part of a growing movement for strong, democratically controlled water systems across Africa and around the world, demanding that water be managed as a public good and fundamental human right” (“Our Water Our Right! NO to privatization!” 2015). Remunicipalization is also framed as response in securitized terms, thus pitting the issue of privatization against the alleged public priority of well-being and safety, as OWOR suggests:

> “In the face of this threat to the human right to water, there is a growing movement of civil society and labor joining together to reject privatization and chart a more just way forward. This is evidenced by over 300 cases of de-privatization (sometimes referred to as ‘remunicipalization’ or ‘renationalization’) in the water sector in the last two decades” (CAPPA 2021a, 16).

Thus, OWOR often highlights stories of failed privatization attempts in places like Pittsburgh, PA, Gabon, and Cameroon, which resulted in high levels of pollution, significant public health

risks, and ultimately, remunicipalization efforts that were highly expensive for local governments, as corporations like Veolia require large payouts for ending contracts.

While the benevolence of state control over water resources is of course theoretically and empirically unstable and debatable, OWOR remains committed to the notion that public sector control of resources offers a much higher likelihood of placing the human right to water at the center of its mission. At the same time, however, OWOR advocates for significantly enhanced community engagement and democratic decision-making in order to ensure transparency and accountability within public-sector management processes. Therefore, democratic principles are one of their key priorities within suggested responses to the threat of privatization:

> The Our Water Our Right Africa Coalition insists that government leaders must invest in public water systems that include meaningful public participation in water governance, with particular focus on the perspectives of those typically left out of decision-making processes, including but not limited to women, low-income people, and rural communities (Abade 2021, 6).

In this context, OWOR views increased public participation as a way for governments to respect, protect, and fulfill the human right to water for all people" (CAPPA 2021a, 16). The prioritization of democratic principles within OWOR's agenda alongside securitized threat-narratives raises yet another distinct challenge to traditional securitization theory, which suggests security narratives are antithetical to democratic deliberation and that de-securitization is crucial for evading unilateral, emergency, decision-making (Buzan et al. 1998). Instead, OWOR calls upon the government of Lagos to issue a state of emergency amid its water crisis, and

simultaneously espouses democratic governance as a key response for overcoming the threat of privatization.

*Who are the agents of security?*

Given that maintaining or re-assigning public authority over water systems is presented by OWOR as the most effective response to the threat of privatization, the primary agent of safeguarding the human-right to water is, in this case, the state government. This too complicates ideas about the state as a domineering and repressive entity in the critical securitization literature. Instead, OWOR views the state as responsible for upholding certain obligations to provide security for its citizens. As one advocate puts it "water is part of security of life" and "anyone that takes away our water, takes our life… constitutionally, the function of government is to provide water for the people" (CAPPA 2021c, 13). Thus, OWOR is clear in suggesting that "public institutions, not private companies, must lead the development of water systems and delivery Africa" (Adediran 2021, 2). Moreover, OWOR calls upon intergovernmental organizations to assist in maintaining public ownership of water systems, calling upon organizations such as the African Union and the Economic Community of West African States to also "intervene when the human right to water is under threat in your member states with financial and diplomatic action (CAPPA 2021a, 17). Overall, state actors are viewed as primary agents who can implement the most effective responses against privatization.

This emphasis on the return to public authority over water allocation is implicitly situated within broader claims about the failure of outsourcing as a model of global governance. For example,  OWOR pushes back against global governance agendas designed to "shrink the state," which they associate with policies promoted by the World Bank and its International Finance

Corporation (Adediran 2021, 1). In this respect, OWOR argues privatization "undermines state sovereignty and the ability to regulate in the public interest" and thus seeks to reaffirm the state's agency, authority, and responsibility over such matters. This is arguably in-part connected to a legitimacy crisis faced by corporations amid increasing scrutiny over their human rights, environmental, and labor abuses. Thus, in response to the determinantal pitfalls of private governance schemes, the executive director of CAPPA contends that "we do not need international financial institutions or corporations to take care of our people" (Abade 2021, 2).

Although state actors are deemed the most capable agents for mitigating the threat of privatization, OWOR also highlights the importance of non-governmental actors in co-constituting governmental responses via inclusion in public deliberation processes, pressure from social movements, and citizen-action strategies that include legal action, media attention, journalism, fact-finding, community outreach, and transnational collaboration. In this sense, the responsibility to safeguard water as a human right falls upon a mutual relationship between governments and "the people' as civil societies and labor activists are also needed to "build resistance to threats of water privatization in countries across the continent" (Adediran 2021, 1). As one leader in the movement put it "If we do not manipulate the decision-making body of this country, we'll always be at the back shouting… a national water policy must be a policy that the people adopted themselves." (Ezeamalu 2019, 2). An important part of holding governments accountable includes building a transnational network of solidarity across communities facing similar challenges across the continent, as OWOR argues: "the threat that this industry poses to water access in Africa cannot be overstated. And together, we can expose the damage that these privatization schemes have already caused, and move decision-makers to keep PPPs out of our communities" (Oluwafemi 2021).

Finally, it is important to reflect on the fact that OWOR has achieved notable and transformative victories over the course of its 8 year campaign. Through the various strategies mentioned above, OWOR has managed to stave off privatization plans that had considerable backing among local governmental actors and the World Bank. Since 2014, OWOR has pressured the Lagos Water Corporation (LWC) to postpone or abandon various plans to design private water schemes that were under consideration by the International Finance Corporation (Ezeamalu 2015). Moreover, OWOR claims a major feat in successfully challenging "the boobytraps that would have made the National Water Resources Bill a nationwide template for privatization," and that "posed a threat to the attainment of the human right to water" (CAPPA 2020, 11). To do so, they leveraged legal support, media attention, messages of solidary from well-regarded Lagosians and several members of the US Congress, and also met with the Minister of Water Resources, all of which contributed to the failure of the bill in the House of Representative (CAPPA 2020). Though privatization continues to loom heavy over Lagos and many other communities that engage with the OWOR movement, advocates are resolute that their collective, transnational efforts will continue to make a difference in the future of water rights. As the head of CAPPA suggests "solidarity had been key in forcing the hands of government hence the need for groups to continue mobilizing and engaging to ensure that the will of the people stands"(CAPPA 2021d). The victories won by the OWOR movement also trouble traditional notions of "successful" securitization, which are associated with the implementation of "exceptional" measures enacted by select elites. Rather, the OWOR challenges the notion that elite actors (like Veolia) can securitize issues without a response from those whose security is at stake, and also adds a bottom-up perspective of what success might look like to a movement whose agency is more widely distributed.

**Conclusion**

This chapter seeks to understand how security is conceptualized within the transnational social movement, Our Water Our Right. I find that OWOR positions privatization as the primary threat to the human right to water, and calls for the return to or improvement of public authority over water systems driven by mutually constituted government decisions that are shaped by both public leaders and nongovernmental members of civil society. More specifically, the security discourse present in this movement challenges several key ideas related to traditional conceptions of the securitization and environmental conflict. First, the source of this contestation surrounding water has little to do with scarcity as a threat-inducing condition, but instead, contestation against privatization revolves around the politics of water access as influenced by global structures of environmental governance and relevant decision-making processes. Second, this analysis shows that the OWOR discourse avoids the individual/absolute binary of traditional security discourses and instead presents vulnerability in terms of a collective but differentiated struggle. Additionally, the OWOR explicitly rejects the notion that private actors can effectively claim authority over issues such as providing access to water or mitigating water crises, and thus presents an alternative counter-discourse to the narratives that outsource security obligations to private sectors actors. This shows that the OWOR is an "active audience" that generates a counter-narrative to delegitimize Veolia's authority claims over environmental security, thus further problematizing the linear interpretation of the speaker-audience relationship of traditional securitization theories. Lastly, this analysis brings forth a security discourse in which instances of "success" are not measured by exceptional decision-making processes, but instead, by the capacity for transnational networks of solidary to enact democratic forms of public engagement

to the effect of ensuring the right to water for all. In sum, the securitization of water issues across the OWOR campaign presents an opportunity to reflect on the emancipatory potential of security as a key political concept for environmental resistance movements.

# CHAPTER 7. CONCLUSION

This dissertation contributes to the literatures on global environmental governance and critical security studies by revealing the ways securitization operates across the transnational sphere of the FEW security nexus. The broad question this dissertation addresses is: *how are environment-security connections conceptualized, leveraged, and contested in certain domains of global environmental governance?* Empirically, chapters 4, 5, and 6 answer three related sub-questions: How is security conceptualized within the FEW security nexus development paradigm and with what impact on notions of agency and legitimacy? How do TNCs leverage the securitization of environmental issues to claim legitimacy in global environmental governance? And how are these securitized legitimacy discourses used by elite actors contested and re-articulated by resistance groups? In this section, I summarize how this dissertation answers these three questions, and outline the key theoretical and practical implications associated with these answers. I conclude with a discussion of the limitations of this dissertation as well as opportunities for future research.

## Summary of Findings

In this dissertation I attempt to unpack the relationship between securitization and global environmental governance, specifically within the transnational sphere of the FEW security nexus. My empirical analyses draw from a synthesis of global environmental governance and critical security studies literatures as well as a critical systems perspective of the FEW security nexus that remains attuned to relations of power, discourse, political economy, and complex governance processes. Conceptually, I tie my interpretation of environmental security across the

FEW nexus to four core themes of legitimacy: governance gaps, structural forces, democratic principles, and audience. I do this while using critical discourse analysis to interpret how different state and non-state actors attribute meaning to environmental security in ways that legitimize or delegitimize certain threats, referent objects, responses, agents, and human-nature relationships more broadly.

In chapter 4, I look more closely at how security logics permeate the FEW nexus. I specifically draw from environmental security scholarship that highlights the importance of interrogating the discursive construction of distinct environment-security narratives (Detraz 2012; McDonald 2012; Dalby 2012;2017). By analyzing environment-security patterns within foundational texts published by the Bonn 2011 conference and IRENA, I find that the FEW security nexus elicits a departure from state-centric authority over security, and sets the groundwork for legitimizing private sector actors as agents of environmental security. This particular environmental security logic also positions scarcity as the main threat, economic productivity as the referent object, and efficient sustainable development as the necessary response. This raises important questions about the accountability of non-state, private actors and whether they can claim legitimacy over governing environmental security across borders. Moreover, this particular conception of security points to a broader shift in the architecture of global governance wherein the state's traditional responsibilities are shared with or reassigned to private sector actors (Mayer and Phillips 2017), bringing to bear structural formations of neoliberal capitalism in which privatization and commodification inform the prevailing discourse and practice of environmental politics.

Chapter 5 then carries this analysis forward by investigating whether and how TNCs turn toward environmental security narratives to claim legitimacy over the governance of security

issues across transnational sphere of the FEW security nexus. Here, I elaborate on the conceptual synthesis outlined in Chapter 2. More specifically, I tie global environmental governance research that speaks to the complex mechanisms through which non-state actors claim and acquire legitimacy (Hale 2020; Dingwerth 2017; Dellas et al. 2011; Bäckstrand 2006; Held & McGrew 2008; Scholte 2011, 2018) together with critical security studies insights that emphasize how power dynamics inform and are shaped by processes of securitization (Bigo 2017, 2016, 2008; Booth 2007; Huysmans 2006; Buzan et al., 1998). I do this while returning to four key themes that provide conceptual backing to processes of legitimation: governance gaps, democratic principles, structural forces, and audience. I find that TNCs rely on particular notions of environmental security to claim legitimacy as security providers amid planetary crises driven by population growth, resource scarcities, and natural disasters. In doing so, Nutrien, BP, and Veolia rely on configurations of outsourcing in which private actors step in to fill the governance void left by unwilling or unable states. They also draw connections between their positions as security providers and their commitments to democratic norms, while invoking structural discourses that valorize Western-centric progress and development to justify their governance interventions in the global South. Their audience in this case consists of primarily Western, elite actors that have taken up concerns about initiating or supporting environmentally and socially friendly investments. Ultimately, I show how non-state actors like TNCs can leverage environmental security as a source of legitimacy. Thus, this chapter also argues that a political economic perspective is necessary for grasping the full scope of environmental security politics. Although the role of TNCs as influential actors in steering the movement and governance of commodified resources remains at the margins of environmental security debates, their claims to

offer environmental protection could potentially reinforce their ability to operate with impunity despite their significant involvement in generating environmental risks.

In chapter 6, I account for counter-articulations of environmental security from a group that stands in direct opposition to one of the TNCs studied in Chapter 5: Veolia. I find that the OWOR movement securitizes their movement while positioning privatization as the key threat, the human right to water as the referent object, remunicipalization as the response, and both the state and civil society as key agents of security. The OWOR campaign also calls for democratic deliberation as a critical element of safeguarding communities against the threat of privatization and the mismanagement of water resources. Drawing from literature that suggests that securitization is an inter-subjective, political process involving agonism, struggle, and contestation (Tulumello 2020; Aradua 2008), I show how the OWOR movement constitutes an active, self-appointed audience of securitization, with the imperative to contest dominant discourses that legitimate private corporations, and neoliberalism more broadly. Moreover, OWOR as an active audience initiates an alternative vision of environmental security while invoking securitization from the standpoint of struggle. In this context, for example, OWOR leverages securitization to hold governments accountable for fulfilling their obligations to ensure the human right to water, and thus the use of emergency rhetoric involves returning (rather than reinforcing) the authority of the state under the pressure of democratic engagement from civil society.

**Theoretical and Practical Contributions**

Overall, this dissertation aims to uncover how security operates in the realm of global environmental politics. My contributions to critical security studies include a unique perspective

of what security "does politically" (Browning and McDonald 2011) in that I analyze the implications of securitization within the distinct space of the FEW security nexus. Specifically, I dig deeper into the connections between securitization and governance and provide a glimpse into the mechanisms through which dominant security discourses impact the broader architectures of global environmental politics by attributing legitimacy to certain political communities (in this case private sector actors). At the same time, I show how prevailing security discourses are contested by subjects-in-resistance and also countered with alternative conceptions of what is means to be secure amid environmental change and who can or should govern this security, for whom, and how. Therefore, this dissertation contributes a unique lens to the environmental security debate by analyzing a wider scope of actors involved in securitization processes and by detailing how dominant and counter-hegemonic discourses interact within transnational domains such as the FEW security nexus.

More specifically, this dissertation adds to a deeper understanding of global environmental politics in four important ways. First, I provide a contextual understanding of environmental security as a powerful concept that contains the capacity to elicit significant shifts in the architecture of global environmental governance and global politics more broadly. Second, I specify the mechanisms through which environmental security can function as a source of legitimacy. Third, I highlight how securitization functions from both top-down and bottom-up perspectives as an inter-subjective and contested process. Lastly, I bring to bear important insights and questions regarding the role of the state in either overseeing or outsourcing the governance of increasingly complex and transnational risks generating environmental (in)securities across borders. To close this section, I also reflect upon the practical implications

these contributions carry for envisioning and implementing modes of political action associated with environmental security.

*Environmental Security and Global Environmental Governance*

As I suggest across each of the chapters, and as other scholars have previously argued, environmental security is a powerful and essentially contested concept (Browning and McDonald 2011). Thus, it is imperative that scholars of global politics understand and keep pace with the performative role of environmental security in shaping the contours of legitimacy, and relatedly, agency and authority, in global environmental governance. This dissertation provides insight into how environmental security operates in this way within the context of the FEW security nexus. While other scholars like Bigo (2008) have extended security studies to account for globalized systems of governance and exchange, this dissertation provides particular insight into how both state and non-state actors operating in the transnational sphere articulate and leverage security discourses related to the environment. Chapter 4, for example, investigates how security is conceptualized within the FEW security nexus as a political space designed by NGOs, governments, and IGOS. Chapter 5 then argues that TNCs have a significant stake in claiming authority over cross-border environmental security challenges, and shows how private actors inform the theoretical and practical basis of environmental security as a popular framework for understanding and enacting contemporary politics. Lastly, Chapter 6 highlights that social movements are an important and influential facet of the globalized landscape in which security is taking on new meaning. Thus, I fill a gap in the critical securities studies literature by expanding upon a globalized perspective of security, and at the same time, I show how transnational discourses contain performative implications for reconfiguring the structure of globalized

relations further by positioning private sector actors as legitimate arbiters of cross border environmental security issues.

Moreover, I contribute to arguments that suggest non-traditional security discourses often reinforce status quo arrangements of capitalism, neoliberalism, and neocolonialism (Dalby 2012; Leese and Meische 2015; Barkawi and Laffey2006) by providing a detailed account of how this process of reification unfolds discursively on a transnational level, and with what effects on the legitimacy of elite actors. I do this first by embracing a critical systems perspective of the FEW security nexus, which highlights how environmental security practices and discourse are tied to structural forces that commodify nature, deregulate state oversight, and perpetuate unequal North/South relations. In this context, Chapters 4, 5, and 6 each shed light on the ways securitization, legitimation, and contestation intersect with structural power dynamics that encourage the preservation of capitalist modes of production, position TNCs as leading authority figures in the domain of environmental security politics, and ultimately make globalized privatization a key the target for resistance movements struggling against hegemonic security logics.

This critical systems perspective also highlights the need to identify more specific discursive contexts within which environmental politics are securitized by different actors across the FEW nexus. With an actor-oriented element of systemic thinking in mind, I apply McDonald's (2012) framework for contextualizing distinct security logics—which asks what the nature of the threat is, what or who is at risk, what are the suggested responses, and who are the primary agents— to conversations across FEW security nexus that among states, IGOs, NGOs, TNCs and resistance movements. This series of questions allows me to illustrate how unique security logics within the FEW security nexus disrupts the architecture of global environmental

governance by complicating the role of the state and private sector actors in governing environmental insecurities, as I shed light on the particular modes of securitization through which actors beyond the state can gain authority over transnational environmental politics more broadly, in which depictions of a certain threat influence suggested responses, agency over such responses, and the governance of security across borders. Thus, I point to the important relationship between environmental security and the proliferation of non-traditional sources of authority across the transnational sphere of environmental politics (Hale 2020; Dingwerth 2017).

I then combine deconstructions of securitization with a detailed account of legitimation to elaborate on how environmental security as conceptualized within the FEW security nexus not only reinforces market-oriented principles of productivity and efficiency but also provides a discursive foundation from which TNCs can claim legitimacy over security challenges on a cross-border scale. BP, Nutrien, and Veolia, for instance, each draw from such environmental security narratives to reinforce the idea that TNCs are well-equipped to provide democratic and normatively appropriate risk mitigation in the context of governmental inaction. Their on-the-ground initiatives relating to such claims include educational campaigns, volunteer disaster response units, anti-terrorist campaigns. Overall, my analysis of the function of environmental security among corporate actors makes two key contributions to the literature on global environmental governance: (1) it delves deeper into the conceptual avenues through which of securitization and legitimation function alongside one another and (2) it investigates how non-state actors justify their authoritative roles in the context of contemporary "governance gaps."

I also shed light on the performative function of environmental security as conceptualized by a transnational movement standing in opposition to the privatization of water. In this case, I show how securitization narratives can carry practical implications for holding governments

accountable for responding to environmental insecurities, and particularly for upholding their commitments to human rights. This finding is consistent with claims that securitization can serve emancipatory ends (Booth 2007), and in taking into account the OWOR movement, I provide an empirical contribution toward understanding how visions of security can have a transformative or justice-oriented impact. OWOR, for example, relies on securitization to foreground collective yet differentiated struggles for socio-environmental well-being in the face of broader structural dynamics that perpetuate uneven exposure to environmental risk. Moreover, their suggested responses involve governmental accountability as well as democratic decision-making, inviting notions of procedural justice into debates about securitization.

Lastly, within my analysis of environmental security as performative concept, I show how securitization can reify the commodification of nature, the dominance of humans over nature, and the perception of nature as menacing, and at the same time, conceptually promote the idea that humans are collectively dependent upon basic life-giving resources. For example, while Chapter 4 argues that thread of scarcity within environment-security narratives can perpetuate anthropocentric and utilitarian binaries between humans and nature and justify policy agendas targeting global South communities, women, and areas where population growth is deemed unsustainable, Chapter 6, on the other hand, highlights the liberatory successes of environmental security narratives that invoke transnational solidarity and the right to water for all. Thus, this dissertation furthers the argument that securitization is not a linear formula with an inevitable outcome (Browning and McDonald 2011), but a contextually dependent, discursive process with varying implications for separate visions of environmental politics.

*Environmental Security as a Source of Legitimacy*

One of my key objectives in this dissertation is to detangle the connections between securitization and legitimation, as much of the security studies literature speaks to the potential for securitization to legitimize certain global structures, elite actors, and forms of political action, mostly in pernicious ways (Buzan et al. 1998, Dalby 2012; 2017). To further elucidate this process, this dissertation pinpoints the mechanisms through which security and legitimacy interact. Specifically, I present four key categories— governance gaps, democratic principles, structural forces, and audiences— that I argue influence how securitization can shape processes of legitimacy. Therefore, this dissertation provides a conceptual synthesis of literatures that can serve as a useful starting point for other studies that seek to investigate the relationship between legitimacy and security across different political domains, and particularly among non-state actors operating in the transnational sphere.

In sum, the conceptual synthesis outlined in the Chapter 2 and again in chapter 5 contributes a foundational point of reference from which to further understand how environmental security can shape the contours of global environmental politics by informing who can gain or claim authority over cross-border environmental challenges. In short, environmental security discourses have important consequences for the governance of environmental risks in that they inform the complex power dynamics between actors driving and experiencing such risks. Moreover, this dissertation contemplates whether and how those claiming authority over environmental security face scrutiny or contestation from relevant audiences. In this context, I argue that counter-securitization processes can also serve de-legitimizing aims, and in doing so, I present further evidence that securitization is an innately political and inter-subjective process shaped by contestation.

*Securitization as a Contested Process*

This dissertation contributes a provocative account of securitization as a political theory by detailing the ways counter claims interrupt traditional conceptions of the securitization process. For example, the OWOR case in Chapter 6 challenges the linear relationship between speaker and audience (Buzan et al. 1998) and instead confirms the notion that security is a political process subject to contestation, agonism, and struggle (Tulumello 2018; Aradua 2020; 2018). More broadly, I show how sites of environmental contestation can serve as wider struggles against global, exploitative systems associated with neoliberal capitalism.

In the case of OWOR, for instance, activists use security concepts to delegitimize the role of private corporations in managing water resources, and to provide a counter claim against the broader system of privatization as propagated by global actors like the World Bank. Therefore, the structural discourse that valorizes progress and development leveraged among corporations such as BP, Nutrien, and Veolia is turned on its head by the OWOR movement. Instead, the OWOR movement reappropriates emergency rhetoric to hold elite actors accountable for their complicity in generating environmental harms. Thus, my contribution to the literature on securitization shows how the process securitization unfolds differently across separate levels and domains of global politics (Brach 2009; Floyd 2010; Rothe 2016). Specifically, I do this by looking to sites of environmental contestation as political arenas in which various groups can use securitization as bottom-up discursive tool to denounce oppressive political structures and formulate alternative visions of security that emphasize collectivity rather than otherness.

*Role of the State*

Lastly, this dissertation also contributes an important perspective regarding the contemporary role of the state in governing contemporary environmental challenges. Though much of the literature on securitization considers the state as a domineering force that often takes advantage of the urgency of security rhetoric to enact undemocratic and oppressive policies and to reinforce traditional hierarchies of global politics (Buzan 1991; Booth 2007; Agamben 2005; Burke 2007; van Munster 2007), I argue that there is much more at stake within processes of securitization regarding the roles of both state and non-state actors. TNCs, for instance, can leverage the performative effects of securitization to claim authority over the governance of socio-ecological risks and to further solidify their hold over the profitable and violent movement of ecologies across borders. This arguably occurs in the context of "outsourcing" in which states are complicit in structuring a world economy in which TNCs are well-positioned to claim authority over issues that traditionally fall under the purview of state responsibility, such as security. Instead of lacking power or authority in the context of globalization, for instance, Mayer and Phillips (2017, 135), argue that "states are to a great extent the intentional architects of the GVC [global value chain] world. GVCs have flourished through the structures and modes of governance purposefully facilitated by powerful states since the 1970s." Through such externalizations, states effectively "outsource" authority over social issues to private sector actors by building a framework of global governance that operates in accordance with deregulation, corporate friendly tax policies, and economic competition (Mayer and Phillips 2017, 136). TNCs, then, can call on governments to help ensure ideal social and political foundations for corporate decision-making. This is evident in BP's statement that "governments need to provide secure access for exploration and development of energy resources; define

mutual benefits for resource owners and development partners; and establish and maintain an appropriate legal and regulatory environment" (BP Annual Report 2013).

In a similar vein, Bigo (2012, 204) suggests that the global proliferation of risk management and transnational security practices is the result of "strategic alliances between diverse public/private agencies that operate across borders, exchanging information, databases, and know-how." Whereas Bigo (2012) focuses on the implications of this trend in terms of the proliferation of cross-border policing, military interventions, and data sharing, I argue that the globalized security discourses in combination with modes of outsourcing result in a wider effort on behalf of non-state actors, notably TNCs, to engage the governance of security issues on a global scale. In this case, BP, Nutrien, and Veolia— while borrowing, in some ways, from traditionally militaristic ideas— inform debates about who has authority over environmental security by asserting their positions as security providers in the context of increasingly dire environmental conditions.

On the other hand, Chapter 6 points to the ways in which securitization can serve as a discursive strategy for holding states accountable for mitigating unevenly distributed environmental risks. The OWOR movement, for instance, calls upon the government of Lagos to enact a "state of emergency" to properly address the water crisis severely impacting the majority of residents living in Lagos. Moreover, the suggested response for combating the threat of privatization within the OWOR campaign is municipalization or renationalization, and governmental actors are deemed well-suited for carrying out renationalization efforts in tandem with collaborative and democratic input from members of civil society. This clearly contradicts traditional accounts of securitization as a tool for state elites to garner unquestioned authority and instead points to securitization as a mechanism through which states can be held accountable in

the context of increasingly normalized outsourcing trends. Additionally, while those who are most at risk according to the OWOR movement include marginalized group, OWOR activists also view society as a whole as mutually dependent upon water for basic human flourishing. This disrupts yet another common view of securitization as a mechanism through which the "other" is inevitably depicted through binary and unequal categorizations of those who are vulnerable or threatening and those who are safe or in a position to protect. Instead, the OWOR movement presents vulnerability in terms of a collective but differentiated struggle along lines of race, gender, and class. Lastly, victories won by the OWOR movement— such as the halting of negotiations between Lagos and the World Bank— point to an entirely different notion of what "success" looks like in securitization processes. Rather than the implementation of exceptional measures by elite actors who sidestep democratic input, OWOR leverages securitization to garner support, hold states accountable, re-articulate privatization (and more broadly neoliberalism) as that which is threatening, and enact their influence over government decision-making.

*Practical Contributions*

In terms of practical contributions this dissertation might provide to "on-the-ground" politics, insights into these unique and unanticipated impacts of securitization are particularly relevant. First, and at its most foundational level, this dissertation shows that how we conceptualize and speak about security matters. Although environmental security might be an attractive option for highlighting the urgency of contemporary environmental changes and the pressing need for various actors to take these changes more seriously, as Chapters 4 and 5 suggest, environmental security narratives can also reinforce status quo politics that drive the

very risks and "threats" highlighted by many proponents of environmental security agendas, such as climate change, toxic pollution, ecological exploitation, or "sub-state" conflict. More plainly, security discourses can affect the distribution of power and authority, and legitimation processes are closely connected to securitized discourses. Therefore, at a practical level, I argue that this dissertation shows that securitization is not only a contested political concept, but in many ways, securitization is also a political tool.

Consequently, if re-appropriated as in the case of the OWOR movement, securitization might prove useful for strategically undermining prevailing logics of the neoliberal order that perpetuate harmful socio-environmental conditions. This claim is consistent with efforts on behalf of Booth (2007) and Wyn Jones (1999) to associate security with resistance, freewill, and the flourishing of humanity. This dissertation adds to these claims by detailing the particular mechanisms through which securitization can be at once leveraged by hegemonic and counter-hegemonic actors across the particular political domain of the FEW security nexus. Moving forward, acknowledging the performative and contested role of security in this space could prove useful for those seeking to make FEW security politics more equitable. In this context, securitization efforts more akin to those leveraged by OWOR could help to push the FEW security nexus paradigm in a more transformative and justice-oriented direction.

**Directions for Future Research**

In providing an expansive view of how environmental security discourses operate on a transnational scale, this dissertation initiates several directions for future research. In terms of limitations and areas for improvement within this particular project, interviews and participatory interaction with both elite and activist actors could enhance the findings across each empirical

chapter. Additionally, attending conferences or meetings pertaining to the FEW security nexus agenda could provide further insight into the various conceptions of security in this space, and whether there are competing narratives that struggle to inform the over-arching goal of the FEW security nexus as global development paradigm. As for the role of TNCs, elite interviews with corporate actors could facilitate a more nuanced understanding of the strategic aims behind their legitimacy claims over environmental security issues. In the case of OWOR, interviews and participatory interaction are also necessary for understanding the importance of securitization for their organization and political aims. Future research might engage in such methodologies to support or contradict the conclusions reached in this dissertation.

Second, this dissertation mainly focuses on legitimacy claims rather than the acquisition or measurement of legitimacy. This limits what I can say about the actual authority gained or lost by legitimation or de-legitimation efforts on behalf of the different groups analyzed in this research. Future research might utilize surveys or interviews to better gauge whether securitization measurably enhances or decreases legitimacy of actors like TNCs. A more comprehensive discourse analysis of texts published or informed by relevant political communities or counter-movements could also help elucidate perceptions about the extent to which state and non-state actors are perceived as legitimate security providers. Future research could focus on this concrete fluctuation of legitimacy to further clarify the relationship between securitization and legitimation. Moreover, one could ask whether the shift from state-centric authority to private sector authority is prevalent in spaces beyond the FEW security nexus, including governmental settings, UN agendas, or other environmentally focused NGOs or IGOs, for example.

Lastly, a broader research agenda surrounding the links between environmental security, justice, and resistance could extend this analysis in multiple directions. For instance, other case studies might expand upon the role of securitization in counter-movements to further understand whether and how environmental security can serve as a tool for environmental justice. On the other hand, it is important to reflect on the potential that other counter movements could view securitization more negatively, particularly environmental defense movements facing the brunt of militarized and securitized exploitative practices. In this case, if security regimes are viewed as inherently threatening, could counter modes of securitization still play a role an important role in such struggles? Otherwise, future research might examine what concepts related to well-being, emancipation, and resistance might replace or stand in opposition to security logics. Overall, more attention to bottom-up perspectives of environmental conflict, defense, and struggle is needed to elucidate the broader spectrum of political dynamics and power relations at play and at stake in debates about environmental security and its role in global environmental politics.

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# APPENDIX 1. LIST OF CODED DOCUMENTS

| CHAPTER | TITLE OF DOCUMENT | SOURCE | YEAR OF PUBLICATION |
|---|---|---|---|
| | | | |
| CHAPTER 4 | Bonn 2011 Conference: The Water, Energy, and Food Security Nexus: Solutions for the Green Economy<br><br>Understanding the Nexus: Background paper for the Bonn 2011 Conference | Bonn 2011 Conference Publications | 2011 |
| CHAPTER 4 | Bonn 2011 Conference: The Water, Energy, and Food Security Nexus: Solutions for the Green Economy<br><br>Conference Synopsis | Bonn 2011 Conference Publications | 2011 |
| CHAPTER 4 | Bonn 2011 Conference: The Water, Energy, and Food Security Nexus: Solutions for the Green Economy<br><br>Policy Recommendations | Bonn 2011 Conference Publications | 2011 |
| CHAPTER 4 | Bonn 2011 Conference: The Water, Energy, and Food Security Nexus: Solutions for the Green Economy<br>Messages from the Bonn 2011 Conference: The Water, Energy, and Food Security Nexus: Solutions for a Green Economy | Bonn 2011 Conference Publications | 2011 |
| CHAPTER 4 | Renewable Energy in the Water, Energy, and Food Nexus | International Renewable Energy Agency (IRENA) | 2015 |

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| CHAPTER 5 | Annual Report and Form 20-F 20109 | BP | 2010 |
| CHAPTER 5 | Sustainability Review | BP | 2010 |
| CHAPTER 5 | Annual Report and Form 20-F 2011 | BP | 2011 |
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| CHAPTER 5 | Annual Report and Form 20-F 2012 | BP | 2012 |
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| CHAPTER 5 | Annual Report and Form 20-F 2014 | BP | 2014 |
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| CHAPTER 5 | Annual Report and Form 20-F 2016 | BP | 2016 |
| CHAPTER 5 | Sustainability Report | BP | 2016 |
| CHAPTER 5 | Annual Report and Form 20-F 2017 | BP | 2017 |
| CHAPTER 5 | Sustainability Report | BP | 2017 |
| CHAPTER 5 | Annual Report and Form 20-F 2018 | BP | 2018 |
| CHAPTER 5 | Sustainability Report | BP | 2018 |
| CHAPTER 5 | Annual Report and Form 20-F 2019 | BP | 2019 |
| CHAPTER 5 | Sustainability Report | BP | 2019 |
| CHAPTER 5 | Our Biodiversity Position | BP | 2020 |
| CHAPTER 5 | Sustainability Report | BP | 2020 |
| CHAPTER 5 | Sustainable Livelihoods | BP | 2020 |
| CHAPTER 5 | Financial Review Annual Report | PotashCorp | 2010 |
| CHAPTER 5 | 2011 Summary Annual Report | PotashCorp | 2011 |
| CHAPTER 5 | 2012 Annual Integrated Report | PotashCorp | 2012 |
| CHAPTER 5 | Agrium Annual Report | Agrium | 2013 |
| CHAPTER 5 | Sustainability Report | Agrium | 2014 |
| CHAPTER 5 | Sustainability Performance Update | Agrium | 2014 |

| CHAPTER 5 | Annual Report | PotashCorp | 2014 |
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| CHAPTER 5 | Integrated Stakeholder Report | PotashCorp | 2014 |
| CHAPTER 5 | Agrium Annual Report | Agrium | 2015 |
| CHAPTER 5 | Annual Integrated Report | PotashCorp | 2015 |
| CHAPTER 5 | Annual Integrated Report | PotashCorp | 2016 |
| CHAPTER 5 | Annual Report | Agrium | 2017 |
| CHAPTER 5 | Business Acquisition Report | Nutrien | 2018 |
| CHAPTER 5 | Sustainability Report | Nutrien | 2018 |
| CHAPTER 5 | Annual Report | Nutrien | 2019 |
| CHAPTER 5 | Annual Report | Nutrien | 2020 |
| CHAPTER 5 | Nutrien's 2020 CDP Climate Change Response | Nutrien | 2020 |
| CHAPTER 5 | Feeding the Future Plan | Nutrien | 2020 |
| CHAPTER 5 | 2020 Environmental, Social, and Governance (ESG) Report | Nutrien | 2020 |
| CHAPTER 5 | 2020 Environmental, Social, and Governance (ESG) Report | Nutrien | 2021 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2010 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2011 |
| CHAPTER 5 | 2012 Financial Report | Veolia | 2012 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2013 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2014 |
| CHAPTER 5 | Making the Circular Economy a Reality | Veolia | 2014 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2015 |
| CHAPTER 5 | Smart Cities: Looking Toward the Future of Urban Life | Veolia | 2015 |
| CHAPTER 5 | Development for the Benefit of All | Veolia | 2015 |
| CHAPTER 5 | Climate: Every Solution Counts | Veolia | 2015 |
| CHAPTER 5 | Annual and Sustainability Report | Veolia | 2015 |

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| CHAPTER 5 | Corporate Social Responsibility: Our Commitments to Sustainable Development | Veolia | 2015 |
| CHAPTER 5 | Activity Report | Veolia | 2016 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2016 |
| CHAPTER 5 | Responsibility: A Factor in Performance | Veolia | 2016 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2017 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2018 |
| CHAPTER 5 | Annual Financial Report | Veolia | 2019 |
| CHAPTER 5 | The Essentials 2019-2020 | Veolia | 2020 |
| CHAPTER 5 | Advanced Search for: insecure, military, resilience, risk, security, threat | Twitter: @Veolia | 2010-2020 |
| CHAPTER 5 | Advanced Search for: insecure, military, resilience, risk, security, threat | Twitter: @NutrienLTD | 2010-2020 |
| CHAPTER 5 | Advanced Search for: insecure, military, resilience, risk, security, threat | Twitter: @BP_plc<br>Twitter: @BP_press | 2010-202 |
| CHAPTER 5 | Website Content | BP.com<br>Nutrien.com<br>Veolia.com | Currently Available |
| CHAPTER 6 | Labour, Civil Society March against Lagos Govt’s Plan to Privatize Water | Premium Times Nigeria | 2015 |
| CHAPTER 6 | Public Water: The Antidote to Failed World Bank Water Policy in Lagos | Bretton Woods Project | 2015 |
| CHAPTER 6 | Lagos Speakers’ Suggestion on Water Privatization a Betrayal of Public Trust – ERA / FoEN | Environmental Rights Action: Friends of the Earth Nigeria | 2016 |

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| CHAPTER 6 | Groups Petition Lagos House of Assembly, Demand Halt to Planned Water Privatization | Environmental Rights Action: Friends of the Earth Nigeria | 2016 |
| CHAPTER 6 | Lagos Water Crisis: Alternative Roadmap for Water Sector | Environmental Rights Action: Friends of the Earth Nigeria | 2016 |
| CHAPTER 6 | Lagos State Water Courts Illegal, Unacceptable – ERA/ FoEN | Environmental Rights Action: Friends of the Earth Nigeria | 2016 |
| CHAPTER 6 | Our Water, Our Right Campaign Mobilization against Water Privatization | Premium Times Nigeria | 2019 |
| CHAPTER 6 | Our Water, Our Right: The Struggle for Justice in Nigeria | Grassroots International | 2019 |
| CHAPTER 6 | Our Water, Our Right: The Campaign for Water Justice in Lagos, Nigeria and Beyond | Corporate Accountability | 2019 |
| CHAPTER 6 | This is Lagos Our Water, Our Right No to Privatization! | Corporate Accountability and Public Participation Africa | 2019 |
| CHAPTER 6 | Our Water, Our Right! NO to Privatization! | Atlas of Utopias | 2019 |
| CHAPTER 6 | Lagosians Fight to Keep the Water Taps away from Capitalism | Premium Times Nigeria | 2019 |
| CHAPTER 6 | Participants at Water Summit want Review of Nigeria's National Water Policy | Premium Times Nigeria | 2019 |
| CHAPTER 6 | Nigeria's Water Emergency: From Resistance to Real Solutions Against Corporate Control | Environmental Watch Africa | 2019 |
| CHAPTER 6 | Rise and Resist: Join the Fight to Stop Water Privatization during Africa Week of Action | Corporate Accountability | 2019 |

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| | Against Water Privatization | | |
| CHAPTER 6 | COMMUNIQUE: National Summit on the Human Right to Water | Corporate Accountability and Public Participation Africa | 2019 |
| CHAPTER 6 | Veolia and Suez: Barriers for Access to Water for All in Africa | African Center for Advocacy | 2019 |
| CHAPTER 6 | Let's Stop Falling in the Trap of Water Privatization | African Center for Advocacy | 2019 |
| CHAPTER 6 | Defending Civic Spaces Under a Global Pandemic | Corporate Accountability and Public Participation Africa | 2020 |
| CHAPTER 6 | How Women Group Protested against Water Privatization in Lagos | Corporate Accountability and Public Participation Africa | 2020 |
| CHAPTER 6 | Africa Water Week: Activists, Labor Union March against Water Privatization in Cameroon | Corporate Accountability and Public Participation Africa | 2021 |
| CHAPTER 6 | Civil Society Groups, Labor Kick against National Water Bill | Corporate Accountability and Public Participation Africa | 2021 |
| CHAPTER 6 | Africa Must Rise & Resist Water Privatization | Corporate Accountability and Public Participation Africa | 2021 |
| CHAPTER 6 | Mozambique: Water Privatization | Corporate Accountability and Public Participation Africa | 2021 |
| CHAPTER 6 | Solidarity Statements: Africa Week of Action Against Water Privatization | Corporate Accountability and Public Participation Africa | 2021 |
| CHAPTER 6 | Water & COVID-19: One Year after Damning Report: Water Shortage Still Persists in Lagos | Corporate Accountability and Public Participation Africa | 2021 |

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| CHAPTER 6 | African Activists Resist Corporate Privatization of Water as World Bank Meets | Corporate Accountability and Public Participation Africa | 2021 |
| CHAPTER 6 | Nigeria: Groups Urge Lagos Govt to Discard Water Privatization through PPPs | Nigeria: Groups urge Lagos govt to discard Water Privatization through PPPs | 2021 |
| CHAPTER 6 | Corporate Accountability and Public Participation Africa | Instagram: Cappa_Africa | 2020-22 |
| CHAPTER 6 | Corporate Accountability and Public Participation Africa | Twitter: @CAPPAfrica | 2020-2022 |
| CHAPTER 6 | Website Content | cappaafrica.org | Currently Available |