The Rising Flood?

Environmental Refugees in a Political Ecology Perspective



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Introduction

The number of environmental refugees is vast and daunting: 25 million in 1995¹ and a possible 200 million as we realize the full effects of global warming (Myers and Kent, 1995-06; Myers, 2005). From former U.S. President Bill Clinton and Vice President Al Gore to former U.S. Secretary of State Warren Christopher, former British Prime Minister John Major, and former Secretary of General of the UN Boutros Boutros-Ghali, among others, these numbers have attracted the attention of world leaders and spawned research and discussion in the academic, policy, and popular arenas (Kibreab, 1997). Currently the UN High Commissioner for Refugees (UNHCR) does not recognize "environmental refugees" as a legally protected group. However, many have called for an expansion of the refugee definition to include environmental refugees and the UN has debated the adoption of the term. Norman Myers, a conservation biologist who has worked with the UNEP, World Bank, the Climate Institute, and Oxford University among others, emerged as the foremost researcher on environmental refugees. His work drives the discussion about environmental refugees. Myers cites global climate change, poverty, and population growth (Myers, 2005) as the primary factors creating environmental refugees.

The concept of environmental refugees has very real consequences for policy. The legal determination of who constitutes a refugee dictates who and who will not be granted refuge and what protections and aid those people will receive. The discourse surrounding environmental refugees is muddled with writers deploying the discourse of environmental refugees toward a variety of ends. Myers and other environmentalists deploy the term to urge the world to act on global warming and fund sustainable development (Lambert, 2001; El-Hinnawi, 1985; Myers and Kent, 1995-06; Myers, 2005; Simms and Conisbee, 2003; Townsend, 2002). Others deploy

¹ According to Norman Myers, 1995 was the last time a comprehensive assessment was done (Myers, 2005).

the term to investigate prospects for a new category of refugees (Bates, 2002; Suhrke, 1994), and still others argue that the concept confuses refugee status and too easily simplifies the complex factors leading to migration (Black, 2001; Black, 1998; Kibreab, 1997). While environmental refugees are widely written about, political ecologists are largely absent from the discussion.² A political ecology³ perspective can help bridge the scientific, political, and legal divides with its unique perspective on the ways different forms of marginalization compound. A political ecology perspective focuses on the "ultimate causes" (Robbins, 2004) of a problem rather than "proximate causes," adds a discourse analysis, and puts an explicitly political analysis back into ecology. At present, the perspective is sorely needed. This paper aims to fill that gap by critically reviewing the environmental refugee literature and applying a political ecology perspective to the discussion. Three questions guide this paper: 1) Is the classification of "environmental refugee" useful or does it mask the ways in which economic, environmental, and political marginality work together? 2) Should refugee-governing bodies, such as the UNHCR, adopt a classification for environmental refugees? 3) If this classification is useful, how can it be practically implemented and who should bear the burden of environmental refugees?

² The exceptions are Edward Carr and Richard Black, Carr is a recent Ph.D and a political ecologist in the Geography Department at the University of South Carolina. Carr has only recently joined the debate on environmental refugees. While Carr cites the environmental refugee literature, he tends to talk about the "links between migration, environment, economy and politics" (Carr, 2005, 927) rather than using or directly addressing the language of "environmental refugees." He develops a framework for analyzing migration choices by placing them in a "Foucauldian conceptualization of power" (Carr, 2005, 925).

Richard Black (1998; 2001), a geographer housed at the University of Sussex and co-director of the Sussex Centre for Migration Research, is perhaps the most prominent researcher on environmental refugees after Norman Myers. Black's approach is broadly political ecological, but he is careful to warn that an analysis should not become so steeped in political ecology that we are frozen into inaction or the only possible action is the overthrow of capitalism.

³ Political Ecology is rooted in the traditions of political economy and ecology. Blaikie and Brookfield (1987, 17) in Robbins (2004, 6) note that political ecology "combines the concerns of ecology as broadly defined and political economy. Together this encompasses the constantly shifting dialectic between society and land-based resources, and also within classes and groups within society itself."

In order to answer these questions, I begin by critically examining the environmental refugee literature and address the debate of whether the classification is useful or not. Second, I apply a general political ecology perspective to the debate and, third, I examine the concept as it applies to two case studies. One case study deals with long-term change and the other with a short-term disaster. I then identify policy strategies for moving forward and, finally, draw conclusions about the environmental refugee concept.

Review of the Environmental Refugee Literature

In mapping the environmental refugee literature, Suhrke (1994) divides perspective on environmental refugees into two categories: the maximalist view and the minimalist view. The maximalists claim that environmental change is the direct cause of migration. The minimalists view environmental change as one of several causal variables, but stress that it is impossible to analytically and empirically isolate environmental change as *the* cause of migration. Scholars fall widely on the spectrum between the minimalists and the maximalists. The doomsdayers attracting the most public attention fall closer to the maximalist end and also tend to be the advocates for "environmental refugee or environmental migrant" language. ⁴ This section first examines those scholars advocating for the use of "environmental refugee" language, then looks at the ways scholars have tried to categorize and define environmental refugees, and finally, explores those who are critical of the concept.

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⁴ From this point onwards, I group "environmental refugee" and "environmental migrant" language together unless I specifically state otherwise. The terms are slightly different but develop out of the same strain of thinking and engender similar critiques.

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Scholars trace the term 'environmental refugee' to United Nations Environment

Programme (UNEP) researcher El-Hinnawi (1985) who defined an environmental refugee as:

"...those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affect the quality of their life. By "environmental disruption" in this definition is meant any physical, chemical and/or biological changes in the ecosystem (or the resource base) that render it temporarily or permanently, unsuitable to support human life." (4)

Although El-Hinnawi uses the term, Myers propels "environmental refugees" into the mainstream. Both subscribe to a maximalist view. Myers' (1993; 1995) definition is cited most often, particularly in the popular press. Myers succinctly defines environmental refugees as:

"...people who can no longer gain a secure livelihood in their erstwhile homelands because of drought, soil erosion, desertification, and other environmental problems" (Myers, 1993, 752).

In his calculations, Myers (2005) claims that as of 1995, 25 million environmental refugees existed compared to 27 million traditional refugees.⁶ Unlike the formal definition of refugees, Myers' refugees may be internally displaced or displaced across national borders. Myers makes no such distinction.

Myers (1995-06; 1993; 2005) uses a broad scalar stroke to paint of view of a world with 25 million environmental refugees in 1995, 50 million by 2010, and up to 200 million

⁵ Kibreab (1997) argues that the literature wrongly attributes the concept to El-Hinnawi and says that the term first appeared in a 1984 report by the International Institute for Environment and Development (IIED. IIED stated "Third World environmental refugees are increasingly fleeing worn out lands for the industrialized countries of the North," (Kibreab, 1997, 21). However, I stick to the bulk of the literature's consensus that El-Hinnawi was the first to use the term. El-Hinnawi is the first to deal with the concept in any substantial way and attempt to define the term.

Additionally, Black (2001) claims that the term was used by Lester Brown of the World Watch Institute in the 1970s. However, El-Hinnawi and Myers acted as catalysts for widespread use of the term.

⁶ Traditional refugees are legally determined under the Geneva Conventions. This definition will be discussed in the following section.

environmental refugees as the full effects of global warming⁷ take hold. Of the 25 million refugees in 1995, approximately 5 million were in the Sahel in Western Africa, where 10 million people had fled from recent droughts but only half had returned to their home. Of the rest, 4 million were in the Horn of Africa and 6 million in China. Myers (1993; 1995-96) develops future predicted environmental refugee flows by from "an 18-month research project carried out in consultation with representatives of governments, intergovernmental bodies, United Nations agencies, the World Bank, and dozens of NGOs including refugee organizations" (Myers, 1995-06, 1, fn 1). While the inclusion of so many "official" sources makes the numbers seem very reliable. Myers bases the predictions on estimates including rises in seal-level, national population growth estimates, urbanization estimates, and poverty projections. In short, the predictions rely on coarse assumptions. His forecasts focus on developing countries and are made at a global scale⁸. Myers implicitly assumes that developed countries in the global North will not create environmental refugees. Although Myers has been writing about the subject for over a decade, his language and arguments have changed remarkably little. He frequently deploys nearly identical sentences and evidence in his papers despite the growing body of evidence and changing knowledge on both climate change and migration (Myers, 2005; Myers, 2002; Myers, 1997; Myers and Kent, 1995-06; Myers; 1993) 9.

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⁷ Myers refers to "global warming" not "global climate change." The language is his, not the author's.

⁸ Castles (2002) also critiques the scalar aspect in his review of the literature (discussed later in the paper).

⁹ In 2005, Myers was still using numbers from his 1995 report as the most recent estimate. Regarding the use of similar language, in 1993, Myers writes "In certain instances, cross-border refugees, notable those with moderate though tolerable economic circumstances, are pulled by opportunity for a better economic life elsewhere rather than pushed by environmental destitution. This description ostensibly applies to many Hispanics heading to the United States. But those people who migrate because they suffer poverty are frequently driven by the root factors of environmental degradation; indeed, it is their environmental plight as much as any other factor that makes them economically impoverished" (752).

Addressing the 13th Economic Forum in 2005, Myers makes so few changes in his language and sentence structures that one almost has to wonder what he has been doing for 10 years. Myers (2005, 2) said "In particular, it is sometimes difficult to differentiate between refugees driven by environmental factors and those impelled by economic problems....[refugees from moderate economic circumstances] are not so much pushed by environmental deprivation as pulled by economic promise. This ostensibly applies to many Hispanics heading for the United

Unfortunately, Myers and Kent's (1995-06) predictions remain the only quantified estimates of environmental refugees.

Although Myers admits that differentiating migrants driven by environmental and economic factors is difficult, for Myers, the environment is the root cause of migration for all environmental refugees. Poverty plays a lesser role as an additional "push" factor. Other factors include "population pressures, malnutrition, landlessness, unemployment, over-rapid urbanization, pandemic diseases and faulty government policies, together with ethnic strife and conventional conflicts" (Myers, 2005, 2). For example, even Mexico creates 1 million new environmental refugees a year (Myers, 2005, 2).

Myers includes some caveats, but these are minor within his essentially neo-Malthusian arguments. The uncritical support of many "environmental refugee" proponents in the NGO sector include Friends of the Earth (2005), the New Economics Foundation (Simms and Conisbee, 2003), and the Forum for the Future (Turner and Slater, 2005); in the political sector (Lambert, 2001); and in the popular press (Townsend, 2002) simply use the same arguments rather than further developing and clarifying the concept. Myers's work primarily concerns itself with environmental refugees created by global climate change. While he may argue for the recognition of environmental refugees, Myers and his uncritical supporters deploy the term to scare the developed world into acting on climate change.

Despite wide use of the term in the NGO literature and a quantified estimate of refugees, environmental refugees are not legally recognized. Currently, refugees formally protected by international law are defined by the United Nations *Convention of Refugees* in 1951 and amended in 1967 as people who:

States. But those people who migrate because they suffer outright poverty are frequently driven also by root factors of environmental destitution. It is their environmental plight as much as any other factor that makes them economically impoverished."

"owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country..."

Refugees have the protection of the UNHCR and the Geneva Conventions. They have the legal right to receive protection and access to asylum. If so-called environmental refugees were to receive protection, either the Geneva Conventions would have to be updated or a new internationally protective status would have to be developed, likely under the purview of the UNHCR. Although possible, any change potentially increasing number of refugees legally protected would face a difficult political battle. Immigration is an increasingly contentious debate in many developed nations and the political will to accept refugees or fund their protection has declined. According to the Washington-based Migration Policy Institute (Batalova, 2006), the United States implemented an annual ceiling on the number of refugees the country would admit. Since the 1980 implementation, the ceiling has declined 70 percent. In 1980, the annual ceiling was 231,700; by 2005, the number had dropped to 70,000 accepted refugees (Batalova, 2006).

While Myers leaves a rather vague definition of environmental refugees created by climate change, other scholars specifically identify a broader array of causative factors and attempt to further define the concept with the hope of eventually codifying it into international law. Suhrke (1994) is one of the first to try to move the discussion toward developing a more specific definition of who and who is not and environmental refugee. Suhrke's (1994) view inches slightly toward the minimalist pole arguing that environmental degradation is only the

¹⁰ The status of "refugee" was developed in the wake of World War II to deal with the mass of displaced Europeans after the war. Originally, the definition contained a geographical marker that only Europeans were protected. The Conventions were later amended and the geographical requirement was eliminated.

¹¹ Ceilings place an upper limit on the number of visas unlike quotas which stipulate a number of visas that *will* be granted.

proximate cause of migration. The root causes lie in population pressures and resource use patterns. Suhrke (1994) differentiates between displacement by deforestation, rising sea levels, and desertification and drought. Additionally, Suhrke (1994) reasons that the language of "displaced persons" is more appropriate than "environmental refugees" when protection from the state is not the objective. However, Suhrke's (1994) case does not fundamentally stray from Myers and makes use of the same neo-malthusians concepts.

Bates (2002) and Hugo (1996) both develop tools that build off Suhrke (1994) and Myers. Rather than making a concrete differentiation between a refugee and displaced person, Bates (2002) sets up a series of continuums and offers an analytic classification scheme. On one end of the continuum, Bates (2002) places involuntary (environmental refugees), then compelled (environmental emigrant), to voluntary (migrant). Bates (2002) additionally classifies refugees based on the type of event: disaster, expropriation, or deterioration (see figure 1). As depicted in figure 1, these include (Bates, 2002, 470) "disasters", "expropriation," and "ecocide." Under her definition, a disaster is an "unintended, catastrophic event", which can be sub-divded into "Natural" (the Montserrat Volcano) or "Technological" (the Three-Mile Island partial meltdown). "Expropriation" is "the willful destruction of environment that renders it unfit for human habitation", and can be sub-divided into "development" (the 3 Gorges Dam in China) and "ecocide" (the use of Agent Orange in Vietnam). Finally, "deterioration" is defined as "an incremental deterioration of the environment" and can be sub-divided into "pollution" (Global Warming in Bangladesh) and "Depletion" (deforestation in the Amazon). Under this structure, a wide scope of causes creates environmental refugees and includes both "natural" events and anthropogenic change.

Sub-Category	Disaster An unintended, catastrophic event triggers human migration		Expropriation The willful destruction of environment renders it unfit for burnan habitation		Deterioration An incremental deterioration of the environment compels migration as constraints to human survival increase	
	Natural	Technological	Development	Ecocide	Pollution	Depletion
Origin	Natural	Anthropogenic	Anthropogenic	Anthropogenic	Anthropogenic	Anthropogenic
Intention of Migration	Unintentional	Unintentional	Intentional	Intentional	Unintentional	Unintentional
Duration	Acute	Acute	Acute	Acute	Gradual	Gradual
General Example	Volcano	Meltdown	Dam Building	Defoliation	Global Warming	Deforestation
Real-World Example	Montserrat	US-TMI	China-3G	Vietnam	Bangladesh	Ecuador-Amazon
Est, Number Displaced	7,000	144,000	1.3 million	7 million*	15 million	115,000

FIGURE 2. Classification of environmental refugees with examples from text.

Figure 1. Types of Environmental Refugees (Bates, 2002, 470)

Hugo (1996) extensively discusses the differences between forced and voluntary migration, internal and international flows, and anticipatory and acute refugees. Hugo (1996) falls toward the minimalist pole but does argue for environmental refugee recognition. Neither Hugo' (1996) nor Bates' (2002) scheme explicitly advocates for differential protection for environmental refugees, but it does move toward a more specific description of environmental refugees. In application, the scheme implies that responsibility would lie with different parties depending on how migrants are classified.

Geographer Richard Black provides a powerful critique of the environmental refugee concept. His work directly responds to Myers' arguments and claims that the case for environmental refugee recognition remains intellectually weak. Black (2001) addresses Myer's work argument by argument. First, Black (2001) problematizes the evidence for desertification and notes that the concept itself has been questioned in recent years. For example, in reviewing an article on one study of desertification-induced migration, Black (2001, 5-6) writes:

^{*}Reflects all types refugees as a result of warfare 1967–1973.

Sources: Montserrat: Monastersky 1997:101; -US-TMI: Miller 1991:423; China: Lou 2000: 23; Vietnam: Glassman 1992:28; Bangladesh: Myers 1993a:754; Ecuador: Bates 2000: 25

In the case of Mexico, after a review of general environmental problems in the country, Schwartz and Notini provie only a brief discussion of an attempt to statistically correlate areas of emigration with areas of 'aridity'. They go on to admit that not all areas are 'degraded', that not all migration form these areas is necessarily the result of desertification. Their rather lame conclusion is that 'our discussion with experts, research, and analysis of the relevant statistics data *will likely confirm* that desertification is a factor contributing to migration from this region' (Swartz and Notini, 1995, 82: my italics)."

He goes on to argue that migration is not a new process and not an 'abnormal' action always in need of amelioration. Black (2001) cites the long tradition of migration in the Sahel to argue that a causal link between poverty, environmental degradation, and migration is hard to maintain. Migration is not always clearly a response to environmental degradation. In some cases, such as the Senegal River Valley area of Mali during the mid-1980s drought, migration actual declines because people do not have the resources available to invest in migration (Black 1998).¹²

In response to refugees created by rising sea levels, Black (2001; 1998) makes the key point that calculating a group 'at risk' from rising sea levels, to predict a resulting flight of refugees, is misleading. Even among Myers' highly impoverished potential refugee areas in Bangladesh, a range of possible adaptations exists. Black (2001, 9) quotes works by Zaman (1989) to stress that people often migrate locally, even in cases of drastic environmental change. In Zaman's (1989) study, Black notes that while 61 percent of Bangladeshi study households migrated, 90 percent of them moved less than 2 miles from their original home. Black's (2001) is suspect of the diversity of agendas of those deploying the term. Black reframes the important questions concluding:

¹² At the same time, circular migration (departure for less than six months, usually involving a greater proportion of women and children) did increase during the drought (Black, 1998).

"If international protection and assistance were to be offered in the future, through the Geneva Convention or some other international instrument, to the supposedly growing ranks of 'environmental refugees', the basis for such intervention would need to be much clearer than it is at present. To what extent do those uprooted by environmental disaster, whether temporarily or permanently, have particular protection or assistance needs? Can it be said with any confidence that addressing the 'root causes' of their flight (as UNHCR has sought to do for political refugees) would be any more successful or relevant in reducing 'environmental' displacement? Finally, if protection and assistance were extended by the international refugee regime to 'environmental refugees', would this help or hinder the battle to focus the world's attention on pressing environmental problems?" (Black, 2001, 15).

Migration expert Stephen Castles (2002) reviews the literature by Myers and Black and attempts to answer some of the questions Black raised in the previous quote. Castles (2002) concurs with most of Black's critiques on Myers' environmental refugee concept. However, Castles (2002) goes a step further and recommends necessary steps for reducing the number of internally-displaced peoples and forced migration. Castles (2002) stresses that whether people are seen as refugees, as other types of forced migrants, or as voluntary migrants has large implications for how they are received. He remains against the environmental refugee term saying that it is "...simplistic, one-sided and misleading" (Castles, 2002, 8). An expanded definition of "refugees" would also threaten the protection of traditional refugees. Castles (2002) notes that since the peak number of refugees in the mid-1990s, the number of refugees has fallen to at 12.1 million UNHCR recognized refugees in 2000. The number did not drop because fewer people were fleeing but because it has become harder to gain recognition.

While Myers advocates for sustainable development, Castles takes a more structural approach to the solution. Castles urges the global North to do two things: 1) end Northern practices that make the situation worse in Southern nations, such as small arms trading and the

purchase of conflict diamonds, and 2) reform global trade rules to give Southern countries a fighting chance.

The reasons for migration and cannot and should not be boiled down to an environmental factor. As Black (2001; 1998) shows, political, economic, and environmental factors are closely intertwined and do not always interact in predictable ways. Myers' environmental refugee discourse takes a fear-mongering approach and attempts to scare governments into action on climate change. At its root, the actual refugees are secondary to Myers' purposes.

A Political Ecology Perspective

A political ecology perspective offers a unique and insightful approach for the environmental refugee debate. More than specifically defined theories, a political ecological perspective brings a unique set of questions to the debate and challenges the seemingly apolitical nature of the maximalist view. Blaikie and Brookfield (1987) define political ecology as a combination of "...the concerns of ecology and a broadly defined political economy. Together this encompasses the constantly shifting dialectic between society and land-based resources, and also within classes and groups within society itself" (17). Political ecology provides a radical approach to the confluence of environmental and political interaction. A political ecology perspective further disputes the notion that the apolitical environment can be the sole causal factor in any migration.

A political ecology approach seeks to understand the following questions: What is the ultimate cause of "environmental refugee"-type migration? What are the interests involved in an environmental refugee discourse? Whose interests does it serve?¹³ The perspective provides

¹³ Black (2001; 1998) also raises this question.

structural, power, discourse, spatial, and ecological analyses that lead to a more nuanced and precise understanding of migration.

First and foremost, political ecology challenges the apolitical nature of any research. The approach maintains that the choices of questions asked and or left un-asked are political. For example, Hugo (1996) creates a typology of environmentally related disaster that might create refugees. He identifies five broad categories, which include naturally induced disasters, technologically induced disasters, economically induced disasters, politically induced disasters, and socially induced disasters. However, separating some disasters as political and others as natural or technological is problematic. Robbins (2004) and other political ecologists show how this sort of "apolitical" analysis is in fact highly political. "Economically induced disasters" such as deforestation only become disasters based on policy response (or non-response) and the ultimate causes of deforestation itself are found variety of complex factors rooted in the political economy and structural factors, not with local residents who have little power to change the situation while bearing the brunt of the costs. Although the Suhrke (1994) identifies several ultimate causes – population pressures and patterns of resource use-- and a proximate causes – environmental degradation – most political ecologists would not agree that population and patterns of resource use are the ultimate causes. Rather, political ecology pushes the analysis a giant leap further. For example, in a classic political ecology text, Blaikie (1985) identifies the ultimate cause of soil erosion as the "reproduction squeeze," or the declining terms of trade between consumptive commodities and agricultural inputs. Inevitably, this leads to either a decline in consumption or intensified commodity production. In Blaikie's (1985) cases studies of soil erosion in Zambia and Puebla, Mexico, sociopolitical marginality created marginalized people and pushed those marginalized people onto marginal lands.

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The perspective also adds a scalar aspect. While Myers examines the case for environmental refugees from a global scale, political ecologists generally start from a localized scale and move upward through variety of scales. A political ecology perspective looks at the specifics of the dynamics of one case and examines how local people, state policy, and economic pressures interact to create a response. Myers, on the hand, looks solely at environmental effects at a global scale. Even when he looks at specific countries, the effects are measured at the national scale based on large assumptions. He examines the situation from a purely biological modeling standpoint and does not investigate the political or economic

While he takes a broadly political ecology approach, Black simply refutes Myers' arguments. He does not attempt to apply a political ecology perspective to specific cases. The following section aims to do just that. The first case deals with a situation of gradual change and anticipatory migrants, while the second case looks at an acute situation.

Case Studies

decisions.

Tuvalu: A Disappearing Act

What would the world do if we knew that climate change was about to destroy 43 nations but did not know which 43? At the final day of the United Nations Summit on Climate Change in Nairobi, Ambassador to the UN Enele Sopoaga posed this very question. He argue that if this were the case, countries around the world would be doing all they could to reduce greenhouse gases. Unfortunately, instead of this veil of ignorance, the world knows which 43 nations could be wiped out by rising sea levels. The world ignores their plight because all are small island

states, among the most powerless nations in the world (Button, 2006). Sopoaga's nation, Tuvalu, a small island nation in the South Pacific, is one such nation.

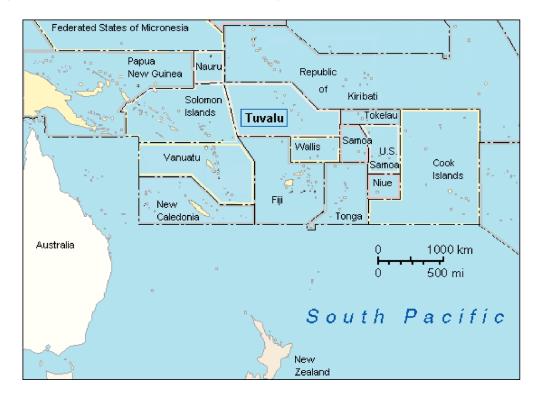


Figure 2. Locator Map of Tuvalu (Tuvalu Islands, 2006).

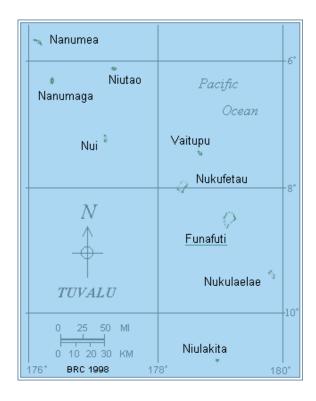


Figure 3. Tuvalu Islands (BRC, 1998).

Tuvalu consists of eight coral atolls in the middle of the Pacific, about half-way between Hawaii and Australia (See figures 2 and 3). With a total area of 26 square kilometers (10 square miles), Tuvalu is one of the smallest, most isolated nations in the world (CIA, 2006). Tuvalu is also one of the lowest lying. It has an average elevation of six feet and its highest point is 15 feet. At its widest, Tuvalu is ½ mile wide but its narrowest point is a mere sixty feet (Pollock, 2005). Tuvalu is extremely vulnerable to rising sea levels. However, it is not only flooding that threatens the island's existence but also the accompanying erosion and salinization. Residents report increased flooding during high tide, salinity affecting major food sources such as the Pulaka root, more intense storms that are also coming at the wrong time of year, and erosion eating away at the island coasts (Pollock, 2005). According to Australian environmental organization Friends of the Earth, nearly 3000 Tuvaluans have already left; some to New

Zealand, some to Fiji, and some to other nearby island nations. In short, Tuvalu has all the makings of a Myers-esque environmental refugees situation.

However, unlike the non-responsive (or non-existent) governments that Myers implies, Tuvalu is taking a pro-active approach to climate change. Tuvalu has emerged as a strong proponent for action on climate change and have sought refuge for their citizens in other nations. In 2001, Tuvalu formed the Pacific Access Category (PAC) immigration deal with New Zealand. PAC, also formed with Kiribati, Tonga, and Fiji, grants an annual quota of 75 citizens each from Tuvalu and Kiribati, and a quota of 250 each for Tonga and Fiji to re-settle environmental refugees displaced by rising sea-levels (FOE, 2005). At a rate of 75 per year, New Zealand has agreed to accept the entire Tuvaluan population of 11,000 people. However, migrants must meet several requirements for inclusion in the quota. Applicants must: hold citizenship from Kiribati, Tuvalu, Tonga, or Fiji; possess an acceptable offer of employment in New Zealand; have English skills; meet an income requirement if the applicant has a dependent; and not have a history of unlawful entry into New Zealand after July 1, 2002 (FOE, 2005). The Tuvaluan government also appealed for Australian help, but the Australian government has thus far refused to accept Tuvaluans displaced by climate change¹⁴.

Although Tuvalu seems to be a clear-cut case of environmental refugees, the Tuvaluan case complicates the concept. Myers makes no mention of national government response, but implies that the Third-World governments of the nations creating environmental refugees will be unable to effectively respond to the tide of refugees. Tuvalu rebuffs this assumption and

¹⁴ The Australian government is divided on the issue. The ruling Liberal party opposes offering Tuvaluans acceptance while the Labor party has proposed developing a Pacific climate change strategy and accepting environmental refugees from flooded island nations (Banham, 2006). According to ZNet magazine, Australian Prime Minister John Howard has marked \$700 million for alternative energy research, but has simultaneously announced that taxes on fossil fuels would be reduced by \$1.5 billion (Ahmed, 2004). Australia also refused to sign the Kyoto declaration.

raises new questions. First, what happens when a legitimate government is in power? Can the government re-locate with its people or does the government and national identity sink along with geographical space it once inhabited? Second, can people be classified as refugees before they have been fully coerced to move? Can the environment be coercive? In this case, Tuvalu is slowly disappearing into the surrounding sea. Thus far, one definitive event has not forced people to move, but clearly they will need to move over the next few years, or perhaps decades. Following the second question, do other governments have a responsibility to accept environmental refugees even when the environment is not totally ruined?¹⁵ Or, do Tuvaluans only receive protection when Tuvalu is completely under water? Following the Katrina case study, the paper will offer suggestions of what might be learned from the two cases.

Katrina: An Acute Disaster

On August 29, 2005, Hurricane Katrina socked New Orleans and surrounding areas in Mississippi, Alabama, and Louisiana. Unlike the rising sea around Tuvalu, Katrina was an immediate disaster. Katrina was one of the deadliest and costliest hurricanes ever to the hit the United States. For weeks after, television screens and newspapers ran pictures of thousands of survivors trapped in the Superdome and surrounded by flood waters, of looting and chaos, and of people being plucked off of roofs (See figures 4 and 5). Katrina Evacuees fled across the country. Figure 5 maps the number of FEMA applications received from counties across the country and provides a sense of the places Katrina evacuees sought refuge.

¹⁵ Bates (2002) and Hugo (1996) refer to "anticipatory refugees" who realize that their situation is deteriorating and migrate before they are forced to.



Figure 4. Flood Victims moving toward the Super Dome (Turner, 2005).



Figure 5. Katrina "Refugees" (Bondseye, 2006).

The Katrina situation, particularly in New Orleans, is ripe ground for a political ecology analysis. Katrina did not become a disaster on its own. As geographer Neil Smith notes "There's no such thing as a natural disaster" (Smith, 2005)¹⁶. The people left behind in the

¹⁶ Oliver-Smith (2005) and Smith (2005) both discuss the concept of environmental refugees as it relates to Katrina. Oliver-Smith (2005) writes from a political ecology perspective.

wake of Katrina were disproportionately people of color and poor¹⁷ and foreign and domestic policy led to their increased vulnerability. For example, during the relief efforts, 5,700 National Guard troops operated out of flooded headquarters and had to wait several days for additional guards to be sent¹⁸. Domestically, the Katrina situation revealed how decades of Federal urban neglect, exurbanization, and a terrorism security focus has severely neglected the urban poor (Graham, 2005; Helvarg, 2006). Many scholars from across the disciplines have been asking political ecology-type questions and searching for ultimate causes of how the disaster came to be. This paper will not build a complete political ecology analysis of the situation,¹⁹ rather it focuses on the use of language in describing the Katrina victims and situation.

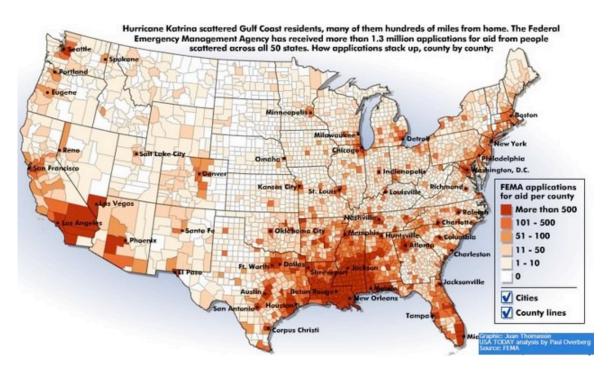


Figure 6. Map of FEMA applications by county (Thomassie and Overberg).

¹⁷ For race and poverty analyses, see Liberman (2006), Kao (2006), Bobo (2006), Renner (2006) and Cutter (2005) among others.

¹⁸ For a timeline of the unfolding Katrina situation see Center for American Progress (2005-06).

¹⁹ By comparison, I do not think we would see this level of analysis for a similar disaster in a developing nation among such a large number or scholars. We seem to ask more probing, deeper questions about the ultimate cause when a disaster happens in our proverbial backyard than when it happens in a developing country where we "expect" it.

In 2006, Lester Brown of the Earth Policy Institute reflected:

"Those of us who track the effects of global warming had assumed that the first large flow of climate refugees would likely be in the South Pacific with the abandonment of Tuvalu or other low-lying islands. We were wrong. The first massive movement of climate refugees has been that of people who away from the Gulf Coast of the United States" (Brown, 2006).

Katrina provided environmental refugee writers an unexpected twist and added urgency to their case. Brown and other environmental refugee proponents were not the only ones to refer to Katrina survivors as environmental refugees. In the days after Katrina hit, the evacuees were frequently referred to as "refugees" (Hull, 2005) and situations described as "Third World" (Dominguez, 2005). After several days, the Congressional Black Caucus held a press conference to discuss they language. Representative Carolyn Cheeks Kilpatrick, a Democrat from Detroit, critiqued:

"First of all, the people are not refugees. They are American citizens.... They pay taxes. They raise their families. They help America grow. And I wish the media would call them American citizens and not refugees, which relegates them to another whole status" (Hull, 2005).

Instead, the National Association of Black Journalists recommended using the terms evacuees, victims, or survivors (Hull, 2005). Curiously, following Former First Lady Barbara Bush's patronizing remarks²⁰ about the evacuees the day before, President Bush made a similar statement on September 6 remarking:

"The people we're talking about are not refugees...They are Americans and they need the help and love and compassion of our fellow citizens" (Lester, 2006).

²⁰ On August 5 in an interview with the American Public Media program "Marketplace", Barbara Bush commented "Everyone is so overwhelmed by the hospitality. And so many of the people in the arena here, you know, were underprivileged anyway, so this is working very well for them" (American Public Media 2005).

Commenting on the extensive use of "Third World" language to describe the post-Katrina situation, Dominguez (2005) argues that the observers were able to use the "Third World" language (and the "refugee" terminology, I would add) because of an otherization of the victims. The people left behind were not "like" the white middle-class commentators; instead they were poor people of color. This political, economic and social marginalization was exactly what enabled the abandonment of so many Katrina victims. The victims had such little power, that the nation's leaders could not fathom that people did not have access to the same resources. Barack Obama, U.S. Senator from Illinois noted just how out of step the planners were with life in inner city America commenting

"what must be said is that whoever was in charge of planning and preparing for the worst case scenario appeared to assume that every American has the capacity to load up their family in an SUV, fill it up with \$100 worth of gasoline, stick some bottled water in the trunk, and use a credit card to check in to a hotel on safe ground" (Obama, 2005).

It is this otherization that enabled such a poor recovery effort and what the Black Caucus was fighting against. Bush argued that Americans cannot be refugees; we are too rich a country. By corollary, the Black Caucus argued that the people left behind were Americans, not refugees, and thus deserved better treatment and aid rather than the abandonment the survivors were facing.

The debate over post-Katrina language raises the power that language holds. Ultimately, I think that Katrina evacuees were left in a very refugee-like situation. However, they did not cross international borders (a requirement for refugee status) and a national government existed that was attempting to alleviate the situation. In this case, the language of "refugees" disempowered the Katrina survivors rather than providing for their protection because it allowed and represented an otherization and turned the victims into non-Americans.

Learning from Tuvalu and Katrina: Implications for "environmental refugees"

Close examination of the application of the "environmental refugees" concept to the Tuvalu and Katrina cases has several implications for the concept. First and foremost, the cases tells us that while the environment itself may not be coercive, the institutional and human response to a situation can turn it into a disaster. Like disaster, "environmental refugees" are as much the creation of human response as they are of an ecological event. Climate change, desertification, displacement by development, or extreme weather may be the immediate cause, but the environment is a medium through which people can exert power and others can be persecuted and marginalized. The reasons for migration are complex and intertwined. If Tuvaluans or Katrina victims had more socioeconomic, political, or geographical power, they would not be in the same predicament. Tuvaluans would have already secured a new homeland and Katrina victims would not have been left behind.

Second, language has power. In cases such as Katrina, it may actually be to people's disadvantage to be called "refugees," particularly if used in a loose, non-technical manner. Currently, explicit rights and responsibilities accompany the 'refugee' title. Although the UN has debated the environmental refugee title on several occasions, expanding the "refugee" category to include these "environmental refugees" as currently defined would strain the already under-funded UNHCR and denigrate the "refugee" category by expanding and loosening the definition to a point where it would be difficult to defend. Simultaneously, if refugees are

²¹ As an example, Smith (2005) points to very different experiences with Hurricane Ivan. In September 2004, Hurricane Ivan killed 27 people in Florida and almost 100 in Granada, yet none died in Cuba despite a direct hit. The UN and Oxfam attribute the zero death rate to Cuban response. Before a hurricane hits, the Cubans organize local cleanup crews to remove debris and the government organizes transportation away from the site. As Smith (2005) puts it, evacuations are organized as community projects rather than left to the invisible hand of the market, which may leave very visible results.

defined as people who cross international borders, people displaced within their own country receive no protection. Because of their geographic isolation, Tuvaluans have a difficult time crossing international borders unless they were legally permitted to do so. Likewise, Katrina victims did not cross international borders. How can the world provide some standard of protection for them?

Several scholars have proposed alternative terms to "environmental refugees" in order to more accurately address the ways in which different types of marginality and causes of migration interact. Some refer to "climate refugees" rather than Myers' "environmental refugees." While this is somewhat more of an accurate portrayal for a Tuvalu situation, it leaves out those displaced by development or those displaced in a Katrina-like situation that may be hard to directly tie to global climate change. U.S. State Department geographer William Wood (2001) suggests the term "ecomigrant" where "eco-" can ambiguously refer to ecological or economic factors for migration. Wood (2001) argues that the term recognizes that ecomigrants are not always violently displaced, but can also include those that are displaced by economic development, such as dams. The switch to "migrants" also maintains the integrity of the refugee term while still including those displaced internally. This term is a more comfortable fit because it more closely accounts for the complex interactions political, economic, and environmental causes of migration. Whether the lay newspaper reader will recognize that "ecomigrant" encompasses both environmental and ecological factors is up for debate. However, changing terms does not necessarily provide protection and aid. The question still remains: Who should take responsibility for environmental refugees, ecomigrants, or climate refugees?

Simms and Conisbee (2003) and other environmental organizations working for environmental refugee recognition advocate for a "polluter pays" principal. They suggest that nations should accept a number of refugees proportional to their responsibility for global greenhouse emissions. However, this suggestion not only ignores that many migrants will not have the means or desire to travel thousands of miles, it also is politically impossible.

Additionally, if global climate change has the potential to uproot hundreds of millions of people as Myers suggests, the industrialized countries of the global north may not be the best suited to absorb refugees as the climate is transformed. What then can be practically done and should we ethically accept? The next section outlines several policy suggestions related to the concept of environmental refugees.

Political Possibilities

"Environmental Refugee" is a poor and misleading title. However, many people remain displaced in environmental refugee-like situations and are not currently protected under the Geneva Conventions. Whatever the name for this unprotected group of migrants, the conditions call for action. Castle's recommendations for structural reform to stem the flow of displaced peoples are important. Below, I add several more immediate suggestions.

> Develop a set of rights for all displaced people, whether internally or internationally displaced. Recognize that the environment is a medium through which people can be persecuted and marginalized.

Just as harming a political prisoner is considered persecution and grounds for refugee status, the environment can also be a medium of persecution. This is a key contribution from the political ecology perspective. Governments have the primary responsibility for aiding their citizens in response to environmental change, however, if a national government is using the environment to persecute its citizens, the international community has a responsibility to protect these

persecuted peoples. Because persecution through the environment has a generalized effect, the persecution operates on a group rather than individual basis. Many governments may be reticent to accept such displaced people. However, if they exerted political pressure to protect these groups, foreign governments could avoid having to accept large numbers of refugees. Rather developing this bill of rights creates an international guiding standard for the treatment of displaced peoples. It also acts as a 'carrot-and-stick' approach and encourages foreign governments to recognize how the environment can be used as a method of persecution.

> Advocate for larger quotas of refugees and for increases in the UNHCR budget.

The previous point makes no guarantee that all those displaced will be helped. Most countries maintain quotas on the number of refugees annually accepted and the admission of refugees has always been a political process. For example, during the Cold War, the United States preferentially admitted those refugees fleeing communist states. With the end of the Cold War, the United States did shift toward more humanitarian preferences²², but all of those in need of permanent resettlement are not accommodated. Defining a bill of rights creates a moral responsibility to act and de-enable the current complicit ignorance.

> Prepare for and take serious action on climate change.

This point recognizes the arguments of Norman Myers and other scientists. Climate change will provide the proximate cause for the displacement, perhaps even millions, of people as sea levels rise and climate changes how we are able to live our lives. We must plan for how to deal with these changes and those facing displacement. A coordinating body at global-level,

²² This is one of the reasons why we see such a large population of Ethiopian and Somali refugees in Minnesota and an overall increase in the number of refugees admitted from Africa.

most likely the UN, is extremely important in this planning. However, advocating for changes in the Geneva Conventions to include "environmental refugees" as another form of refugees endangers and undermines the current protections granted to the traditional group of refugees (Kibreab, 1997). Furthermore, the use of "environmental refugee" reduces the discussion of migration to a relationship of simple cause and effect, masking the complex ways in which marginality, the environment, economy, and politics works.

The need to act on climate change is real. However, fear-mongering through the threat of millions of environmental refugees de-legitimizes refugees and assumes that all of those displaced will move across national borders and that the global North will not also have displaced people.

Conclusions

This paper has reviewed the literature on environmental refugees, applied a political ecology perspective to the debate, examined the applicability of the term in two different cases, and looked at the policy implications of the term "environmental refugees." In the end, "environmental refugee" is not a useful term. It overshadows the complex factors leading to migration. The variety of ends that it is deployed to makes it the environmental refugee concept unclear. Various authors use the term as a fear-mongering tactic to scare industrialized national governments in the global North to act on global warming while others use the term to indicate the many ways in which the environmental change can act as a "push" factor towards migration. The literature lumps refugees (forced migration across international boundaries), internally displaced peoples (forced migration within national boundaries), and migrants responding to a variety of different environmental, ecological, and societal factors, into one category. If we are

serious about recognizing that the environment is a medium through which people can be marginalized and persecuted, a key contribution from the political ecology perspective, or about planning for future potential flows of migrants proximately displaced by climate change, we need to be specific and clear about our definitions. I have made several immediate policy suggestions to add on to Castles structural recommendations.

There is a lesson to be learned here. When anyone speaks about broad, important things and boils it down to one cause or uses fear toward action, be highly skeptical. Indeed, scientists speaking about important things such as the population bomb (Ehrlich) or the tragedy of the commons (Hardin) often miss key points. This sort of positivist thinking holds a great deal of power over decision-making. In order to better effect the environmental refugee debate, political ecologists need to develop more localized case studies that allow for the complex interactions between environmental, economic, and political marginalization. From these studies, geographers should to develop a better estimate of those in environmental refugee-like situations based on local factors. Ultimately, Geographers, particularly political ecologists, need to take a greater role in policy-making.

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ACRONYMS

IIED International Institute for Environment and Development

NGO Non-Governmental Organization

UNEP United Nations Environment Programme

UNHCR United Nations High Commissioner for Refugees