

Threatening Dystopias: Development and Adaptation Regimes in Bangladesh

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Development in Bangladesh is increasingly defined by and through an adaptation regime, a socially and historically specific configuration of power that governs the landscape of possible intervention in the face of climate change. It includes institutions of development, research, media, and science, as well as various state actors both nationally and internationally. The adaptation regime operates through three interrelated processes: imagination, experimentation, and dispossession. Each of these processes is produced and manifested both materially and epistemically. The adaptation regime is built on a vision of development in which urbanization and export-led growth are both desirable and inevitable. For the rural poor, this entails dispossession from agrarian livelihoods and outmigration. As this shift contributes to the expansion of production of export commodities such as garments and frozen shrimp, the threat of climate change and its associated migrations is reframed as an opportunity for development and growth. *Key Words:* agrarian studies, climate change adaptation, climate migration, development, political ecology.

孟加拉的发展, 逐渐藉由和通过调适体制进行定义——一个面临气候变迁时, 管理可能介入之地景的特定社会和历史权力构成。它包含了发展、研究、媒体和科学之制度, 以及来自国家与国际层级的各种国家行动者。调适体制通过三个相关过程进行运作: 想像、实验与夺取。上述每个过程皆是在物质和认识论上生产并体现。调适体制建立于发展的愿景之上, 其中城市化和出口导向成长皆为可欲且无法避免的。对乡村的穷人而言, 它引发了农业生计的夺取和向外移民。当此一转变导致了诸如布匹和冷冻虾等出口商品的生产扩张时, 气候变迁的威胁及相关的迁徙, 则被重新架构为发展与成长的契机。 *关键词:* 农业研究, 气候变迁调适, 气候移民, 发展, 政治生态学。

Cada vez más el desarrollo se define en Bangladesh por y a través de un régimen de adaptación, una configuración de poder social e históricamente específica que gobierna el paisaje de posible intervención frente al cambio climático. Nacional e internacionalmente, esto incluye instituciones de desarrollo, investigación, medios y ciencia, lo mismo que varios actores estatales. El régimen de adaptación opera a través de tres procesos interrelacionados: imaginación, experimentación y desposesión. Cada uno de estos procesos es producido y se manifiesta tanto material como epistémicamente. El régimen de adaptación se construye con una visión de desarrollo en la que la urbanización y el crecimiento liderado por las exportaciones son tan deseables como inevitables. Para los pobres rurales, esto implica desposesión de su medio de vida agrario y salida migratoria interna. En la medida en que este cambio contribuye a expandir la producción de bienes de exportación tales como vestuario y camarón congelado, la amenaza de cambio climático y sus migraciones asociadas es reformulada como una oportunidad de desarrollo y crecimiento. *Palabras clave:* estudios agrarios, adaptación al cambio climático, migración por clima, desarrollo, ecología política.

On the sidelines of the 2015 United Nations Climate Conference in Paris, while delegates of the UN's member states were reaching a global agreement on reducing and responding to climate change, representatives of the world's leading development agencies were meeting nearby at the Development & Climate Days workshop. The goal of the workshop was to discuss strategies to “seize the opportunities presented by climate-compatible

development.” Through lectures, panels, role-playing games, and other interactive sessions, participants discussed with an almost breathless enthusiasm the opportunities offered by climate change for realizing a particular vision of development. This vision, organizers explained, would entail “tough talk” on the transitions in energy, land use, and human habitation that they described as “crucial” and “necessary.” Although speakers saw these transitions as imperative due to the

effects of climate change, they also saw them as “opportunities.” The excitement surrounding these opportunities was illuminated by colorful neon stage lights bouncing off the historic wooden beams of the handsomely renovated event space.

Throughout the two-day workshop involving eighteen plenary and breakout sessions, speakers implored the more than 200 participants, primarily policymakers, scientists, and development practitioners, to “speak the language of business.” Business, we were told, is a natural ally of development and climate change adaptation. “Do you accept that in the long term, development is about deep structural transformation of economies?” the leader of one major aid agency¹ boomed animatedly into his microphone during one plenary session. Nearly everyone in the room raised their hands in agreement. He continued:

We need to talk about development and climate change together. . . . Development needs to be at the center of the conversation about climate change. . . . If we go ahead thirty years down the road, if we’re looking at a village today, maybe no one in that village will live there anymore, and they’ll all be working in a garment factory down the road. So our job [as development practitioners] is to help manage that structural transformation for the benefit of the people who live in those villages.

The crowd was energized. The speaker had crystallized the vision for the future of the gathered development agencies, one articulated repeatedly through their discourse and activities concerning climate change adaptation. The specter of climate-induced ecological crisis was translated by the speaker into possibilities for industrial growth and export-led economic development (along with the demographic shifts that will accompany them).

As I watched from the back of the room, having just arrived in Paris after two years of fieldwork in Bangladesh, I was struck by how this vision of rural futures mirrored the narratives I heard repeatedly from development practitioners in Dhaka, the capital of Bangladesh. It seemed that the village of this man’s parable might easily be one of the villages where I have worked for several years in southwestern Bangladesh, in the district of Khulna. His narrative of rural decline, as well as his normative vision of the need for urban development alternatives, aligned closely with the ways in which development practitioners and policymakers in Bangladesh discuss the future of these villages and their inhabitants. In this coastal region of

Khulna, a complex of ecological and political–economic shifts threatens rural livelihoods and even the existence of rural populations and the landscapes they inhabit. In what follows, I argue that the convergence of Bangladesh’s contemporary development regime with new discourses and practices of climate change adaptation is not only transforming Bangladesh’s coastal geography but also shaping it as a laboratory for such development throughout the rest of the world.

Adapting Bangladesh

This article examines the emergence of climate change adaptation as a mode of governing both people and landscapes in Khulna. This governance is contingent on new imaginaries of a certain and devastating future under climate change and a discourse about the inevitability of this future both globally and in Bangladesh in particular. In response to this sense of inevitability, many development agencies have begun to propose dramatic (even previously unthinkable) social and spatial reorganizations of the rural coastal zone of Bangladesh. Although the vision of these agencies is predicated on many of the same assumptions and goals that have characterized the development project (McMichael 2004) since the 1950s (Hart 2001; McMichael 2008; Watts 2008), the discourse of climate change makes them different in their appeals to urgency, inevitability, and scientific authority. Through the adaptation regime, the dispossession of rural communities and growth of an urban industrial economy come to be seen as both inexorable and propitious futures.

This new developmentalist logic of climate change adaptation obscures how Khulna has long been manufactured to be a site of extraction through global capital. In the resulting narratives, complex histories of dispossession embedded within broader dynamics of precarious land tenure, political economies of development, and agrarian transformation are reduced to metrics of climate impacts. The particularity of this ahistoricity echoes a broader uneasiness of climate scientists and policymakers with a historical analysis of climate change (Demeritt 2001; Dove 2015). Perhaps most critically, these narratives obscure the insistence among local communities that there are alternatives to this threat of rural dystopia wielded by those who promote it. The threat of decline of rural communities in Khulna is at odds with the visions of rural futures propagated by peasant social movements that have

mobilized in this region for decades (Adnan 1993; Paprocki and Cons 2014).² These movements locate the threats to their lives and livelihoods not in climate change but in agrarian dispossession resulting in particular from a transition to shrimp aquaculture and in deep structural inequalities in land and labor relations (Paprocki 2015; Paprocki and Huq 2017). In response, they offer political solutions focused on autonomous local agricultural production and greater equality among agrarian producers. These movements have focused on a return from shrimp cultivation back to traditional rice agriculture, a transition with significant implications for the ecologies and populations of rural communities (Paprocki and Cons 2014; Afroz, Cramb, and Grünbühel 2017). Their mobilization stands in stark contrast to the antipolitics of adaptation that proposes the death of the peasantry as a fore-ordained consequence of an impending climate crisis.

The arguments developed in this article are based on two years of research in Bangladesh, both in rural communities in Khulna and in the capital city, Dhaka, between 2014 and 2015. I conducted more than 150 interviews with representatives of nongovernmental organizations (NGOs), donors, government and UN agencies, and research organizations. I also conducted approximately 130 interviews with farmers and rural laborers in Khulna, as well as with twenty migrants who have migrated from rural communities in Khulna to Kolkata, India. These findings are also based on participatory research conducted at climate change conferences in Rotterdam, Paris, Kolkata, and Kuala Lumpur. My analysis was augmented by an examination of a broad collection of government, NGO, and donor studies and planning documents, newspaper reports, and other gray literature.

Adaptation Regime

Development in Bangladesh is increasingly defined by and through what I call an *adaptation regime*, a socially and historically specific configuration of power that governs the landscape of possible intervention in the face of climate change.³ This adaptation regime operates through three interrelated processes: imagination, experimentation, and dispossession. Each of these processes is produced and manifested both materially and epistemically. *Imagination* refers to the work of enframing Bangladesh as a space of climate crisis (Mitchell 1988), such that its social and ecological conditions can only be understood in relation to the impacts of climate change

and the vision of future habitation of the region is similarly delimited by this sense of impending crisis. This work of imagination is amplified through a process of *experimentation* with development interventions that are considered suitable for producing livelihoods appropriate to this changing climate. These interventions, referred to as climate change adaptation, facilitate agrarian *dispossession* by shaping and disciplining the possible production strategies of the region's inhabitants. Development practitioners engaged in the adaptation regime laud this dispossession as an opportunity for development and growth, owing to its contributions to the production of urban export commodities. It is bolstered by the sense of the inevitability of climate crisis.

Each of these dynamics of imagination, experimentation, and dispossession is produced through and in conversation with existing development regimes in Bangladesh. Critically, these dynamics also characterize the development regimes that have shaped this region historically. In the sense that these dynamics are specific to this spatio-historic context, they also are likely to manifest differently in other places. Nevertheless, the adaptation regime is necessarily always manifested both materially and epistemically. Elsewhere, the manifestation of these material and epistemic dynamics will articulate differently in relation to specific histories and relations of development.

The adaptation regime itself does not have agency; rather, it is an agglomeration of actors (including donors, development practitioners, policymakers, researchers, and journalists) who do exercise agency within their own spheres (sometimes in parallel but often in active coordination with one another). These discrete actions do not necessarily produce a coherent trajectory, yet in aggregate, they do have real, intelligible effects. Therefore, in describing this regime, I do not intend to invoke a unitary "thing" but rather an interconnected set of relationships that take form in a particular way in this unique historical moment in Bangladesh. As such, descriptions herein of the acts of the adaptation regime refer not to the regime itself as an actor but to the aggregate effects of the actors composing it.

Institutions of development, research, media, and science, as well as various state actors both nationally and internationally, all participate in the adaptation regime. These actors both possess and endow the regime with authority. They legitimate this authority through their appeals to both scientific knowledge about ongoing changes in the region as well as their uncertainty concerning the future implications of

climate change (Watts 2015). As such, the authority of the adaptation regime is paradoxically grounded in both knowledge and uncertainty about the present and future. Yet, to be clear, the adaptation regime also contains multiple perspectives and sometimes contradictions. *Regime* does not denote a single or totalizing authority. Rather, the adaptation regime evolves through the agency and interaction of multiply situated actors who collectively shape and enforce its mode of governing.

The adaptation regime concept builds on political economies of development that theorize development regimes as intrinsically global in their material and ideological power yet both administered and officially recognized in their national manifestations and particularities (Friedmann and McMichael 1989; Goldman 2005; Ludden 2005; Gellert 2010; Akhter 2015). Although Bangladesh's adaptation regime is historically produced and concrete (as I examine later), it has been produced relationally within a global hierarchy of development and accumulation within and between nation-states (Hart 2001). I examine both global processes and local specificities to illuminate the multiple scales through which production and social reproduction are managed and governed in the name of adaptation (Orlove 2009; Watts 2015).

Bangladesh's contemporary adaptation regime is at once a continuation of and a rupture with past development regimes (Ludden 2005). In many ways, adaptation programs have resulted in the same material impacts of previous development regimes (particularly agrarian dispossession) and have reinforced their long-standing logics and processes (Ireland and McKinnon 2013). Yet the interface of development and climate change has also produced new understandings and discourses about the landscape, how it is changing, and what must be done to respond. Many development practitioners suggest that climate change presents a break with previous strategies and logics of development, in the sense that it produces new imperatives for transformation. If the impacts of climate change are inevitable, then the mandate to "adapt" is also inexorable. The scale and imperative of this imagined transformation under climate change are unprecedented, thus distinguishing it from that of prior development regimes.

In theorizing adaptation regimes, I build on critical scholarship from political ecology and environmental studies concerning the new opportunities and risks associated with discourses and interventions responding to climate change (Adger et al. 2001; Watts 2011; Marino

and Ribot 2012; Barnes and Dove 2015; Watts 2015). These new interventions conducted in the name of adaptation are embedded in long histories of development, understood as a conceptual apparatus for ordering global hierarchies of wealth and power (Ferguson 1990; Hart 2001; Li 2007; McMichael 2009). Additionally, the tools of agrarian studies, which questions teleological predictions of the disappearance of the peasantry (McMichael 2008; Akram-Lodhi and Kay 2009; Wolford 2010), facilitate an exploration of what we might call the agrarian question of climate change. That is, the article examines the kinds of agrarian transitions that will result from climate change or from attempts to adapt to it—questions that have been debated since Kautsky's foundational text (Kautsky [1899] 1988).

Bangladesh as Ground Zero

The role of Bangladesh as ground zero of climate change adaptation grew out of its status as ground zero of development; that is, of what Hart (2001) called "big D" Development, a project of intervention in the "third world" emerging during the Cold War. The centering of Bangladesh as ground zero was contingent on two dynamics: first, enframing Bangladesh as perpetual "basket case" and, second, establishing it as a laboratory for development practice and research. As I explore here, these processes continue to shape the works of development in Bangladesh and, indeed, the adaptation regime itself.

Development Regimes in Bangladesh

The history of Bangladesh itself has progressed alongside the growth of global development imaginaries and regimes. In the aftermath of the brutal war of independence from Pakistan in 1971, unprecedented amounts of foreign aid poured into the country to finance reconstruction; by 1979 these aid flows were equivalent to 20 percent of Bangladesh's gross national product (Hartmann and Boyce 1983). This aid has not come without conditions, however. As Sobhan (1982) argued, it produced a belief among major donors that "the size and importance of their contribution to Bangladesh's development effort [gave] them a right to dictate how it should conduct its development affairs" (146). The country's first administration, led by Sheikh Mujibur Rahman, had an uneasy relationship with foreign donors, owing largely to the latter's Cold War antipathy to the new government's avowed socialism (Sobhan

1982; Lewis 2011). Shortly after gaining independence, Bangladesh was infamously referred to by a U.S. diplomat as a “basket case,” a characterization that has haunted the country ever since.⁴ After Sheikh Mujib’s assassination in 1975, these tensions cooled (even if the external cynicism directed toward the country did not) as the military government of General Ziaur Rahman worked closely with the World Bank (as the leader of a consortium of major foreign donors) to implement far-reaching market-led reforms, including trade liberalization, denationalization of the jute and textile industries, devaluation, monetary stabilization, establishment of early export processing zones, and reduction of subsidies by raising prices of public goods (Sobhan 1982; Uddin 2005; Muhammad 2006; Van Schendel 2009). The World Bank and other foreign donors continue to exert a strong influence over Bangladesh’s national budget and policymaking (Byron 2015). The results of these reforms have been extraordinary; in 2014, the Pew Research Center called Bangladesh the second most pro-market-friendly country in the world, and *Forbes* magazine dubbed it a “capitalist haven” (“Bangladesh World’s 2nd Most Pro-Free Market Country” 2014).

Many scholars have noted that Bangladesh’s capitulation to these reforms reflected not only a transformation in economic policy and resource flows but also a surrender of considerable sovereignty over both domestic and international policy in exchange for ongoing aid commitments (Muhammad 2006; Lewis 2011). This capitulation has been bolstered by an expanding urban elite whose class interests have become bound up with the interests of foreign donors (Sobhan 1982). As Lewis (2011) wrote, “The content and representation of Bangladesh’s economy and society had now become absorbed within the international project of developmentalism. . . . [Today, aid] remains a powerful influence at the level of ideas and policy” (39). Thus, early skepticism (if not contempt) of Bangladesh’s right to self-determination was quickly succeeded by the hegemony of a development regime firmly rooted in the nascent neoliberal development model. The significance of this developmentalism extended beyond the Bangladeshi state, as the country became a global “test case of development,” in the words of two former World Bank economists (Faaland and Parkinson 1976).

This hegemony coincided with the emergence of one of the most robust apparatuses of development in the world (Lewis 2011). The model of neoliberal development was propagated largely through an NGO sector that grew rapidly (Devine 2003); today NGOs

have a presence in at least 90 percent of Bangladeshi villages (Siddiquee and Faroqi 2016). As these NGOs increasingly took responsibility for social welfare activities, such as education, health care, and the delivery of drinking water, the provision of services that were formerly considered the purview of the state was increasingly privatized (Feldman 1997; White 1999). In the process, accountability for the provision of these services and the welfare entitlements of citizens were scaled back (Wood 1997), and the provision of market-based development mechanisms such as microcredit was scaled up (Paprocki 2016). The rise of Bangladesh’s NGO sector was linked with the country’s expansive capitalist market reforms through comprehensive structural adjustment. Collectively, they have provided fertile ground for the emergence of the adaptation regime.

From Basket Case to Development Laboratory

The role of Bangladesh in the adaptation regime is only the most recent phase in a long pattern of such experimentation. In 1959, through support from the Ford Foundation, the U.S. Agency for International Development (USAID), and Ayub Khan’s military regime, the Pakistan Academy for Rural Development (PARAD) was founded to institute a “social laboratory” in Comilla (in southeastern Bangladesh) for experimentation with new strategies in rural development and “cooperative capitalism” (Haque 1977; Ali 2013). The program itself ultimately exacerbated rural inequality and dispossession, as land transfer from small to larger farmers grew within the cooperatives it created (Haque 1977; Blair 1978; Khan 1979). Yet, despite its failures in reality, the model was largely regarded as a success in global development circles and replicated throughout the “Third World” (Blair 1978; Ruttan 1997; Ali 2013). This success could be viewed more in its epistemic functions, in the sense that it offered development practitioners and the scientists who worked with them a platform for exploring the possibility of a model for a suite of technologies that could be universally replicable (Choldin 1969). East Pakistan (and later Bangladesh) provided the perfect platform for such a laboratory because of its severe impoverishment, as well as supposed lack of governing capacity, suggesting its need for external intervention.

In the 1980s, Bangladesh was at the front line of population control efforts, as neo-Malthusian discourses of resource scarcity and overpopulation framed

a new generation of development programs. With the support of the Ford Foundation, USAID, the World Bank, and other bi- and multilateral donors, clinical trials and other experiments with Norplant, intrauterine devices, and tubal ligation were carried out under the auspices of development programs (Hartmann 1995; Hardee, Balogh, and Villinski 1997). In 1981, Bangladesh received the largest total and largest per capita amount of funding for population control of any country in the world, almost ten times more per capita than neighboring India (Herz 1984). Although these programs facilitated access to some reproductive health care for poor women, they were also plagued by reports of failure to obtain consent from trial participants and forced sterilization (Hartmann 1995; Hardee, Balogh, and Villinski 1997).

By the early 2000s, Bangladesh was again in the spotlight of global development imaginaries through the burgeoning microcredit industry. Microcredit programs and the development and research agencies that promoted them promised an “end to poverty” through small loans to rural women (Yunus 1999). Over 60 percent of rural households are members of microfinance agencies, which by 2008 claimed some 10 million members and an annual loan disbursement of US\$1.8 billion (Khandker, Koolwal, and Badruddoza 2013). The proliferation of microcredit programs brought Bangladesh worldwide attention as a global model for this new development “panacea” when Mohammad Yunus (and the Grameen Bank that he founded) won the 2006 Nobel Peace Prize. Critics of microcredit, however, pointed out that despite unrestrained enthusiasm (even “evangelism”) for this new model for rural development, little evidence existed that it had any real impact on the reduction of poverty (Rogaly 1996; Duflo et al. 2013). Moreover, several studies have found that microcredit is implicated in the social and cultural alienation of women, exacerbation of indebtedness, and other forms of rural dispossession (Cons and Paprocki 2010; Karim 2011; Paprocki 2016).

As these examples illustrate, in its short history, Bangladesh is and has been a key site in the global development project, a geography of imagination and experimentation with new frontiers in “big D” Development. It is in this context that the emergence of the adaptation regime in Bangladesh must be examined, both to understand the role that Bangladesh has played in its emergence as well as to better understand the regime itself. The role of Bangladesh at the forefront of climate change adaptation highlights the deep

imbrication of the development project in the emergence of the adaptation regime.

This history of Bangladesh as a development laboratory is also central to its role in the adaptation regime. Margins are important sites for understanding broader processes, and they are produced relationally with “centers” (Cons and Sanyal 2013). Like other marginal spaces, Bangladesh’s status as a frontier of climate change adaptation, including the imagination of its acute vulnerability, makes it a privileged site for understanding the global production of the adaptation regime (Paprocki n.d.). Thus, I do not see Bangladesh as an abstracted case study from which to examine the adaptation regime. Instead, I locate Bangladesh spatially and historically, understanding it as a relational node within the production of this broader global regime (within which it is always and already articulated).⁵ As development practitioners imagine Bangladesh’s climate dystopia and pursue climate action on the basis of it, they produce not only a regime of adaptation in Bangladesh but also a global adaptation regime that responds to dystopic visions of a climate-changed future.

Imagination

The role of Bangladesh in understanding the impacts of and adaptation to climate change and, conversely, the role of climate change discourse in understanding Bangladesh’s development landscape today are equally important dynamics in the adaptation regime. In interviews I conducted and public events I attended in Dhaka, development practitioners and government officials alike asserted the inseparability of climate change from any possible imagination of Bangladesh’s future. Every conversation about Bangladesh’s development over the next decade to the next century thus must reflect on and respond to the possibility of climate crisis, a continuously asserted existential risk. The notion of this inseparability is an important tenet of the adaptation regime and is what makes Bangladesh the ideal site for its establishment.

At a public seminar in Dhaka in January 2015, the Secretary of Bangladesh’s Ministry of Environment and Forests, the primary ministry tasked with managing climate change adaptation efforts, appealed to the audience of adaptation experts (practitioners and academics) to recognize the importance of Bangladesh in this global adaptation landscape. “This is the ground zero of vulnerability,” he proclaimed; it is “disaster’s homeland.

... We are living testimony of what is happening due to climate change.” The Secretary’s concern with framing this relationship indicates the importance of establishing Bangladesh both epistemically and ontologically in this global regime. The international finance and support of adaptation programming in Bangladesh is contingent on the ideological consensus concerning its vulnerability. This recognition of Bangladesh as “disaster’s homeland” both facilitates the acquisition of resources for adaptation and catalyzes the transformation of rural spaces into laboratories of that adaptation.

Memoirs of “The End of the World”

Much of the work of the adaptation regime, then, involves imagining what the future will look like, and that often has a dystopian quality (Swyndgedouw 2010). Khulna is the perfect place to carry out this work of imagination because many researchers and development practitioners already regard it as a sort of dystopia. “Munshiganj is the end of the world,” said a U.S. consultant hired by USAID to lead its flagship adaptation program in the Southwest, known as Climate-Resilient Ecosystems and Livelihoods (CREL). I had just returned to Dhaka from a visit to the union of Munshiganj, home to several of CREL’s “model villages.” I interpreted this as a comment on the remoteness of this area. Munshiganj is the southernmost union of Khulna Division, considered widely to be the most vulnerable region of the world’s most vulnerable country. The southwest is cut off from Dhaka and the rest of Bangladesh by the Padma River; traveling there takes the better part of a day, involving a variety of different modes of transportation. Munshiganj in particular is where the road ends, bordered to the south by the Sundarban mangrove forest and to the west by India.

Besides conveying remoteness, though, this statement reflects a deeper anxiety often expressed about the uncertain, risky, and dystopian future of the southwest. This anxiety is often marked by the imaginative geographies that Farbotko (2010b) characterized as “wishful sinking,” in which climate vulnerable sites are valuable only once they have disappeared, thus demonstrating the urgency of climate action for the sake of the rest of the world. That much of this landscape is already experiencing an ecological crisis facilitates a vision of Khulna as climate dystopia, and the sense that this dystopic future might even already be upon us. Climate change experts facilitate the

imbrication of this region in the adaptation regime by circulating time-lapse maps of its coastline being inundated by sea-level rise. Visiting researchers, consultants, and journalists make day-long field visits to see settlements precariously perched on embankments. They accompany their accounts of these visits with photographs of erosion and postcyclone cleanup efforts. These narratives offer a prophetic slippage between the present and future tenses of this climate dystopia, auguring the climate crisis that will come or that might have already arrived. The imagination of Bangladesh’s dystopic future has become “common sense”⁶ (Gramsci 1971), by drawing on this imagery of the coastal region today. Yet, this ambiguity about Khulna’s present and future dystopias allows for a spurious insinuation: that the challenges faced by coastal communities today are the direct result of climate change.

The texts produced by these field visits are semiotically rich, and both shape and are shaped by the way in which the region is understood in relation to climate change. One donor quipped to me, “There is not a single document in this country that does not start with ‘Bangladesh is the most vulnerable country in the world to climate change.’”⁷ His comment reflected not only the awareness of this sense of vulnerability but also awareness of its hyperproliferation. In addition to the vast body of gray literature, visiting interns, journalists, consultants, and others working in the adaptation industry produce a body of literature we might call *climate crisis memoir*, which appears in blogs, on NGO Web sites, in the local and international English-language press, and in undergraduate and graduate theses.⁸ In these memoirs, authors recount stories of desperate people whose homes they have visited and who have most likely been displaced by some event that the author links to climate change. Stark photographs depict signs of ecological change, such as erosion, cracked earth, or barren landscapes, absent explanations of local political ecologies or broader context.

These memoirs often highlight the author’s own anxieties about the demise of the coastal landscape alongside descriptions of the lives of the people who inhabit it. A sense that the people of the southwest are merely being “kept alive,” in the words of one donor, pervades conversations about the development of the region. “These people are doomed,” their lives are “shit,” in the words of others. “You get this grim feeling that they have no future,” explained one researcher to me, about her visit to Khulna: “You just think, ‘You guys are

fucked.” These comments convey a sense not only of future threats but also the notion that Khulna is already a kind of dystopia. What they elide is the assumptions about what exactly it is that makes the lives of Khulna’s inhabitants so “shitty” (a word I heard repeatedly in this context throughout my fieldwork). Although the threat of rising waters is usually at the forefront of these kinds of reflections, they often blend into more nuanced descriptions of the experts’ own imaginations of the challenges of rural livelihoods—that it is not only climate change but the difficulties of the agrarian livelihood in Bangladesh generally that make these people’s lives miserable. The “backbreaking” work, in the words of one official from the UK Department for International Development (DFID), of being a farmer in the remote, hot, and crowded swamp that these people call home is a cause of great concern for many development practitioners and other visitors. Their comments articulate a broader assumption that climate change adaptation experts working in Bangladesh express repeatedly; that is, that the objects of their adaptation programs are people who have no hope and are living on the brink. They are people who are in need of alternative pathways out of their current lives and livelihood conditions, and these are pathways that development agencies are uniquely positioned to provide. The realities of climate

change are in many ways incidental to this imagination of desperation and need for development.

Fundamental to these perceptions of agricultural livelihoods is a linked assumption that farmers do not want to continue being farmers and that climate change adaptation therefore offers them an opportunity to move out of agrarian livelihoods. At a lecture in Dhaka on climate finance, one senior official with the Asian Development Bank (ADB) addressed this directly in response to how the ADB thinks about population and land issues. He said, “Who is going to do farming? The sons of farmers don’t want to do it. They have the same aspirations as you and I! Agriculture will have to be looked at totally differently. In the future, we’ll look at the farmers instead as the CEO of the farm.” Indeed, the official’s assumption that farmers have the same aspirations as a room full of donors and development practitioners is foundational to the discourses of the adaptation regime.

These memoirs construct climate misery as an object of development, serving to justify development interventions in the name of adaptation. They operate as memoirs not only in the sense of biography but also in the sense that they memorialize an anticipated loss of life, an anticipation that is an artifact of their own design. The memoirist becomes the subject of



Figure 1. Signboard in public market in Khulna detailing measures for climate change response and disaster risk reduction in the southwestern coastal region with a diagram of the greenhouse effect. (Color figure available online.)

the narrative, with the residents of the coastal region serving as their object. What is most troubling about the narratives is their incongruence with the stories of the residents themselves about the complex historical and contemporary dynamics shaping their communities. Climate crisis narratives often suggest, either directly or obliquely, that residents do not understand the changes reshaping their landscapes. One memoirist wrote, “Climate change is the buzzword of the decade, and yet the very people who live on the coasts of Bangladesh, directly impacted by global warming, rarely understand the term” (Khanom 2016). On the contrary, my own ethnographic research suggests that residents of Khulna understand global warming, its politics, and the broader context of environmental change in their region quite well. Thanks to a steady stream of radio reports about climate change, NGO-sponsored educational programs in schools and community groups, and other public information campaigns through billboards in public markets (see Figure 1), street theater, and other formats, the science and global geopolitics⁹ of climate change are well known to residents of this region. They can also offer detailed, nuanced descriptions of the ongoing ecological changes they are experiencing and their own perceptions of the dominant drivers of these changes.

Experimentation

Bangladesh is the experiment for the future of the world. (Senior administrator at a major rural development agency in Dhaka [2 April 2014])

Much of the enthusiasm among adaptation experts in Bangladesh is centered on the successful transformation of the coastal zone into a “laboratory” in which innumerable experiments can be carried out to test what adaptation to climate change might look like (cf. Knorr-Cetina 1992; Tilley 2011; Hennessy 2013). This use of Bangladesh as an adaptation laboratory also turns on the historical relations of development experimentation described earlier. One expert explained that Bangladesh is “the place where the rest of the world comes to learn how to tackle climate change.” Consultants, planners, and researchers celebrate the development of Bangladesh as a landscape of “innovation” (a well-worn development buzzword) in which the very fact of destruction creates opportunities for experimentation with new ideas and

technologies. As the idea of Bangladesh as adaptation laboratory is developed and celebrated by foreign and Bangladeshi adaptation experts alike, it becomes clear that this success has less to do with the promise of any particular intervention or set of interventions than it does with forging a landscape of experimentation. These interventions are thus considered successful as experiments even when they participate in the production of crisis.

To catalogue potential adaptation experiments, NGOs and research organizations have begun to compile inventories and checklists that list a wide range of technical interventions that they have identified as possible responses to climate change, available for replication in climate-vulnerable communities around the world.¹⁰ Inventories are documented in reports and spreadsheets that are circulated among various agencies and presented in seminars in Dhaka. Some examples include an unpublished Adaptation Technologies Matrix developed by the Asia Pacific Adaptation Network, a table of “Adaptation Measures” published in the USAID report “Adapting to Coastal Climate Change” (USAID 2009), and a Climate Change Adaptation Inventory developed by the DELtas, vulnerability and Climate Change: Migration and Adaptation (DECCMA) project, a consortium of researchers from Bangladesh, India, Ghana, and the United Kingdom. The latter, among the most robust iterations of such inventories, contains 122 “documented examples of observed adaptation” from Bangladesh, India, and Ghana, including “any choices or adjustments to climate variability and change” (Tompkins et al. 2017, 5). The authors of this latter report explained that “these adjustments may be in response to, or in anticipation of, real or perceived climate stressors” (5). At a dissemination workshop for this inventory in Dhaka in 2015, researchers explained that they had identified possible adaptation options for the inventory using keyword searches for both academic and gray literature in Google, Google Scholar, Academia.edu, and other academic databases. In this way, potential adaptation strategies come to be understood tautologically as any actions that someone has already called adaptation strategies. At the workshop, researchers noted that they had confronted an analytical problem that some adaptation options are considered successful by some but unsuccessful by others. All adaptation options made their way into the inventory, regardless of this interpretive analysis. What the inventory also misses

are any ways in which people navigate their changing environment that are not referred to as adaptation strategies.

In an exemplary demonstration of such inventories, the NGO WorldFish created a Climate Smart House for a single family in one coastal village. Raised up on concrete stilts, the Smart House is stocked with technical fixes to match every climate-induced problem WorldFish could imagine, from the “sanitary” latrine on the roof to the rain-fed fish tank underneath (Hossain, Nurun Nabi, and Kaminski 2015). When I visited the Climate Smart House, its residents generously gave me a tour of its many features, most of which were in various stages of disrepair. One WorldFish staff member whom a colleague and I interviewed in Dhaka in December 2014 noted, however, that “it’s not for community replication, it’s for the donors,” continuing that it exists now principally “for the Web site.” I interpreted this to mean that the power of the Smart House is more ideological than material, to the extent that it served as a demonstration of possible modes of experimentation, ideally to garner additional funds for future projects to be implemented by WorldFish itself. It is in this epistemic sense that the Smart House serves the adaptation regime.¹¹

Some NGOs are developing adaptation “technology parks,” where assemblages of possible interventions are collected and modeled (e.g., Siddique 2015). In describing one such park (and inviting me to visit), a European consultant responsible for developing the project explained in June 2015, “We have the space to play around, and to invite other organizations to play around with us.” Sexy high-tech experiments like geosynthetics (polymer sheets used to stabilize eroding coastlines) and ultraviolet disinfection (used to purify drinking water) sit neatly alongside more systemic interventions such as coastal zoning and saline aquaculture expansion. Adaptation becomes common sense through this proliferation of interventions and the selection, appropriateness, and geographic targets of interventions begin to appear self-evident. An adaptation expert at one UN agency explained to me in March 2015, when I asked her about the scope of their work on climate change, “We don’t define adaptation, we just implement adaptation projects.” It is through the adaptation regime, then, that the interventions that can be considered adaptation projects are determined and adaptation is rendered technical (Li 2007). In this way, adaptation is pursued devoid of a political analysis of the multiple possible futures that any particular intervention or selection of interventions might promote (Grove 2016).

These geographies of experimentation are managed through the spatial governance of interventions by various development agencies. One World Bank consultant shared with me a map of the coastal region that he said was replicated in almost every internal report or proposal circulated within and among development agencies conducting adaptation work in the coastal zone. The map depicts a color-coded diagram of Bangladesh’s polder system, a network of 123 low-lying islands surrounded by protective dykes composing the land mass of the entire coastal zone. In the map, every polder of the southwestern region was highlighted in various neon shades, with a key indicating which polders had been claimed by which development projects and which were “available” for new proposed experimental interventions. The map recalls those produced at the Berlin Conference during the Scramble for Africa, as do frequent comments by representatives of various agencies referring to their project sites in the possessive case (e.g., “That’s one of *our* polders”).¹²

The threat and discourse of the dystopic future of the southwest becomes both rationale for experimentation and excuse for its failures. The spatial imaginary of a landscape that is already on the verge of annihilation allows planners to treat the southwest as an adaptation *tabula rasa*. One donor discussed this approach as a policy of “no regrets,” suggesting that if the landscape is going to be destroyed anyway or is not “worth saving,” then there can be no regrets in conducting experiments with uncertain and potentially destructive results. When it comes to the expansion of shrimp aquaculture, practitioners contend that any production in a landscape that they deem to be on the verge of collapse is a success of adaptation (in the absence of any alternative possibility for comparison). If shrimp aquaculture takes the place of rice agriculture (and the livelihoods and communities that are dependent on it), then the idea that the latter is not viable or will not be viable in the near future reframes this dispossession as a fortuitous bonus.

One manifestation of this landscape of experimentation is the constant dissemination of information through “evaluations” of NGO development projects, a body of knowledge production that exists in its own methodological and epistemic plane (see also Ferguson 1990). When it comes to climate change adaptation, these evaluations often serve to establish more that an experiment was conducted rather than any particular result it might have garnered. Adaptation options are produced for the sake of demonstration, a category that indicates an experiment sitting outside of any particular social context. The problem is that many such experiments are exactly just

that—experiments. The administrator of one UN agency described to me his frustration with the discrepancy between a small “test plot” with a signboard in English and a technology that “actually works” in the field and that farmers are adopting. Throughout rural Bangladesh, seemingly every possible space, from drinking wells and convenience stores to many agriculture and aquaculture fields and fertilizer factories, is dotted with such colorful signboards emblazoned with conspicuous logos indicating the NGOs that have implemented and the donors that supported the project. That these signboards are frequently printed in English, a language unlikely to be read fluently by a single resident of any given Bangladeshi village, indicates their function as symbols for donors on site visits (or for pictures for promotional Web sites). This administrator explained to me that particularly in the case of agricultural adaptation experiments, however, the results of these test plots are often much better than they are if and when farmers implement them in their own fields. “We’re promoting or pushing technologies without really understanding what’s going on,” he remarked to me. It is precisely, then, the role that such projects perform in shaping the geography of experimentation that constitute them as adaptation strategies.

Dispossession

The discourse of Khulna’s dystopic future often begins and ends with a question, articulated succinctly by one World Bank administrator: “Is it even worth keeping people there?” Of course, the answer to this question is deeply normative. Who gets to ask a question like this, and who gets to answer it? What happens if the answer to that question is negative? These speculative calculations and the results of responding to them reflect a process of dispossession in the adaptation regime.

The adaptation regime does not create new avenues of dispossession. It builds on the mechanisms of dispossession forged within previous development regimes. It strengthens these ongoing dynamics of dispossession through epistemic interventions that instill a sense of urgency and inevitability. The material impacts of this dispossession can thus be observed in relation to the secular dynamics of development in the region, intensified and articulated in new ways and at unprecedented scales.

Garments, Shrimp, and Dispossession

Thanks in no small part to the significant presence and role of international donor agencies in Bangladesh,

the official discourse and paradigm of development in Bangladesh since the 1980s has strayed very little from neoliberal development orthodoxy. This synergy is illustrated by the government’s own Vision 2021, an election manifesto of the ruling Awami League party promising that Bangladesh will become a “Middle Income Country” by the year 2021, the fiftieth anniversary of the country’s independence. Vision 2021 has become a mantra of both government officials and donors, promising that Bangladesh will become “the next Malaysia” (Mozena 2014; Hasina 2015). This vision represents a mandate for export-led growth and accompanying social and economic transitions. For the World Bank, achieving this vision will require a concerted transition of Bangladesh’s labor force into the nonfarm sectors (Muzzini and Aparicio 2013; Path to middle-income nation 2014; World Bank 2014).¹³ The World Bank’s 2013 World Development Report singled out Bangladesh’s export garment sector for contributing to an urbanization rate of 30 percent, double the rate in 1980 when the garment sector was still in its infancy (World Bank 2012). The sector has grown from an annual export value of US\$300 million in 1983 to US\$10.7 billion in 2008 (Mottaleb and Sonobe 2011) and today accounts for more than three quarters of all exports from the country (World Bank 2016).

Yet, the growth of the frozen shrimp export industry is also central to this vision, in both its contribution to export diversification and its role in transforming the agrarian economy. This export-led vision of market growth sees shrimp as contributing to Bangladesh’s economic autonomy, as reflected in a slogan outside the Fisheries Department compound in Khulna, translated to “an autonomous Bangladesh cultivates more fish” (see Figure 2). With shrimp exports valued at US\$550 million in 2014, it is the fastest growing agricultural sector, with an average expansion of 6.2 percent annually between 2011 and 2016 (Ovi 2014; World Bank 2016). It is seen as critical to the expansion of “noncrop agriculture,” which the World Bank regards as a more productive sector and therefore necessary to the growth of Bangladesh’s economy (World Bank 2016). Between 1984 and 2015, the area under shrimp and prawn cultivation in Bangladesh grew from 64,246 ha to 275,274 ha (Pokrant 2014; Belton 2016).

Relatedly, and perhaps more importantly, the “productivity” gains garnered through the growth of shrimp aquaculture have precipitated significant rural–urban migration (Adnan 1993; Datta 2006; Paprocki and Cons 2014; Pokrant 2014; Belton 2016).¹⁴ Combined



Figure 2. Slogan outside the Fisheries Department in Khulna. (Color figure available online.)

with migration motivated by a wide range of modes of agrarian dispossession throughout the country, the availability of a seemingly endless supply of cheap migrant labor from rural areas has contributed to the vigorous growth of Bangladesh's garment industry (Siddiqi 2000). As one World Bank report explained, "Improving rural productivity by modernizing agriculture and diversifying nonfarm activities, in order to free up manpower for use in more productive activities, is also essential for growth" (Muzzini and Aparicio 2013, 48). The transition from rice agriculture to shrimp aquaculture has motivated a loss of agricultural livelihood opportunities, contributing to this process of "free[ing] up manpower." Belton (2016) estimated that complex agricultural systems in this region require 54 percent more labor (measured in person days per hectare) than that required of shrimp production, whereas villagers I interviewed in the region cited rates as high as 99 percent. Despite the discrepancy in these figures,¹⁵ they both reflect a clear process of dispossession from rural livelihoods in the transition to shrimp.

Moreover, this transition accounts for the loss of other economic and subsistence activities, such as poultry and livestock rearing, native fish culture in homestead farms, homestead fruit and vegetable cultivation, and gathering of cooking fuels (Datta 2006). These losses are largely due to rising soil salinity resulting from long-term shrimp aquaculture, with the salt from *ghers* (shrimp enclosures) steadily encroaching into homesteads, making even land

left for small garden plots largely infertile (see Figure 3).¹⁶ In this context, the question cited earlier of whether it is "worth keeping people" in villages in Khulna is inflected not only by the awareness of the certain and uncertain threats of climate change but also by an existing political economy of development that is driving dramatic social, ecological, and demographic transitions. Indeed, shrimp aquaculture drives agrarian dispossession whether it is promoted as a climate change adaptation strategy or otherwise.

Promoting Migration

It is in this context that the discourse of migration as a strategy for climate change adaptation has emerged. Through the adaptation regime, climate migration has been embraced as an opportunity for a particular vision of development in the coastal zone and the country in general. This emerging vision of migration as adaptation is not unique to Bangladesh (Tacoli 2009; Farbotko 2010b; Felli and Castree 2012). Linking visions of uninhabitable rural spaces with those of the economic opportunities offered by migration, this narrative proliferates through discourses surrounding climate refugees and through particular development strategies carried out in the name of adaptation (Hartmann 2010). This narrative is based upon the assumption that people living in



Figure 3. Shrimp *ghers* in Khulna. (Color figure available online.)

coastal communities in the southwest do not want to remain where they are and that migration is desirable.

Many donors have developed programs that aim to promote this idea directly. At one event in April 2014 at a large, frigidly air-conditioned hall in Dhaka, approximately fifty representatives of major donors, NGOs, and research and government agencies gathered to discuss the advantages of such an approach. Each attendee was greeted at the door with a complimentary coffee mug bearing the words, in bright green and red, “LIVELIHOOD MIGRATION: Not a threat, A tool for climate change adaptation.” During the seminar, a film was screened featuring interviews with men who had moved from the southwest to Dhaka and were working as rickshaw pullers. One of the men interviewed pled to the camera (in Bengali), “I pray to God that I am able to go back to my village and farm again.” That this statement contradicted the upbeat message the organizers were trying to convey seemed to be lost on most of the workshop’s attendees. An official from DFID, commenting after the film ended, discussed the need for greater recognition among donors and government agencies of the “climate change migration dividend.” By this, he explained that he meant the benefits to national development of creating a workforce of people who have migrated out of climate change-affected areas into urban areas where they can participate in the industrial, export-oriented

economy. This understanding of the development potential of climate migration is embraced by the Bangladeshi government in addition to the donor community; the 2009 Bangladesh Climate Change Strategy and Action Plan, citing the impending displacement of 20 million people in the near future, explained that “migration must be considered as a valid option for the country. Preparations in the meantime will be made to convert this population into trained and useful citizens for any country” (Ministry of Environment and Forests 2009, 17). The implication of the government (here diverging from most donors) is that countries of the Global North must accept migrants from Bangladesh who are threatened by the impacts of climate change.

This climate change migration dividend theory reflects the growing discourse within the adaptation regime that agrarian dispossession is both inevitable and desirable. An executive at another large international donor agency funding climate change adaptation programming in Bangladesh explained to me during one of his brief visits the potential he saw in the contemporary moment in Bangladesh to shift away from the logic that he had observed in his career, which had previously focused on rural development, meaning improvement of rural livelihoods *in situ*. He contrasted this view with a more recent movement that he saw as grounded in the acceptance of the risks of climate change, coupled with a recognition of a

broader fundamental and inevitable rural-to-urban economic transition. He explained that his own interpretation of the need for climate migration had more to do with the desires of rural inhabitants to relocate because they would prefer an urban livelihood. He explained,

There are a lot of people moving because it [life in rural communities] is absolute shit and they want to get out of it. If you look at it economy-wide, and sort of, you've got to stand back and look at the demographic transition that's occurring in any country, I don't mean the population, I mean the transition of the economy from a rural to an urban one is something that's happening and will go on happening.

This comment reflects the synthesis of an awareness of the impacts of climate change with a normative perception of the value of agrarian livelihoods in a rapidly transforming economy and ecology.

This donor continued by expanding on the role of experts in promoting this transition away from an agrarian economy: "I do think that when you're working on climate change, it's about trying to introduce that vision of what the future will look like." This comment suggests the broader function of adaptation experts in securing the hegemony of the adaptation regime. The regime itself is contingent on the articulation of Khulna as a space without a future. To that end, many donors have developed programs to support off-farm employment and urban development as key components of their climate change adaptation portfolios. Some examples of programs cited by donors and NGOs for off-farm employment generation include training in rickshaw repair, garment manufacturing, and shrimp value-chain work (e.g., shrimp net building and assembly line processing). One researcher described this work as part of a broader vision to develop "alternative megacities" in Bangladesh to which migrants can transition, explaining that "Khulna has the potential to become a huge megacity" because of its port and the Special Economic Zone (PowerPac) in nearby Mongla. The expansion of major export processing zones in periurban areas throughout the country is seen as a necessary step in this planned urbanization.

Whereas public discussions about the use of migration as an adaptation strategy focus on the benefits of these urban and periurban transitions, in private many donors speak more openly about what they consider the necessary disposessions in rural communities that will effect such migrations. One donor representative

discussed the ways in which their "resilience" approach was fundamentally at odds with a rights-based approach, which insists that people have a right to stay in their homes, describing this alternative approach to resilience as a "brutal" but necessary logic. To that end, he asked, "Why are we going on investing in these places without a hard-nosed analysis of whether these places are worth saving?" This, then, is the explicit articulation of the implicit assumption of the necessity of dispossession to the adaptation regime; that is, that rural livelihoods will play a diminished role in the future of development under climate change.

Indeed, many practitioners focus directly on the role of these migration patterns in promoting development in Bangladesh. One member of a panel on climate migration at a conference on climate change in Dhaka in 2015 described development policies that help people to stay in their communities of origin as a "policy disaster." She continued,

Voluntary migration of some members of the family should be used as a tool for climate change adaptation. If we are too romantic in thinking about helping people to stay in their places of origin, then we are trapping them in chronic poverty. . . . One has to think *big*. Instead of looking at migration as a problem of urbanization, we need to recognize that development will never happen if we don't encourage migration.

As this declaration of the benefits of climate migration highlights, despite the trauma implied by dystopian imaginations of climate change in southern Bangladesh, experts I spoke with were surprisingly sanguine about the future. Even as it draws attention to the catastrophic potential of climate change, the adaptation regime proposes that the crisis of climate change should be treated as an opportunity. The notion of turning threats into opportunities has virtually become the mantra of the adaptation regime. This is a foundational logic in many proposed climate change adaptation strategies. It is a speculative strategy that closely resembles what Klein (2008) called *disaster capitalism*: "orchestrated raids on the public sphere in the wake of catastrophic events, combined with the treatment of disasters as exciting market opportunities" (6). Klein situated disaster capitalism more broadly in relation to neoliberal capitalism, in particular the intensified post-September 11th, post-Katrina neoliberalism that is marked by a sense of uncertain but perpetual crisis (see also Gotham 2012; Adams 2013).

The great diversity of adaptation strategies in the southwest suggests a range of possible futures generated

by the adaptation regime. Yet, even where these adaptation interventions are not predicated on the explicit dispossession of rural inhabitants, they entail a developmentalist vision based on an understanding of the impossibility of rural futures. I have elsewhere called this dynamic “anticipatory ruination” (Paprocki n.d.).¹⁷ Thus, even development projects that intend to intervene in forms of agricultural production fundamentally threaten peasant livelihoods (Araghi 2009). For example, a representative of USAID’s largest adaptation program (involving a series of agricultural interventions in the coastal region) explained to me that the approach of their work is to get people to move away from their rural communities (as opposed to supporting sustainable development within them).

In Bangladesh, the notion that those rural livelihoods most vulnerable to climate disaster are already obsolete facilitates this focus on the opportunities that are opened up via climate change. Experts express (to one another, at conferences and meetings, and in newspapers and other public fora) the need to be “positive” about the potential benefits that can be derived from climate change, not to be afraid of change or of experimentation and, indeed, to have the “courage” to do so. The discourse of “opportunity” shifts the focus onto the positive impacts of the inevitable destruction that will take place due to climate change, reframing dispossession as progress.

Conclusion

The adaptation regime reshapes Khulna’s social and physical landscape through a dialectical exchange between, on the one hand, material interventions in the landscape and the communities that inhabit it and, on the other, the epistemic construction of the limits of possibility for its future. Practitioners wield the threat of a future dystopia under climate change while responding to a contemporary rural political economy characterized by a state of development that they already regard as dystopic.

To return, then, to the parable with which we began at the Paris climate conference, development practitioners who celebrate “deep structural transformation of economies” are the actors who perform the work of imagination, experimentation, and dispossession that constitutes the adaptation regime. The village whose inhabitants are all “working in a garment factory down the road” is the landscape on which the work of the adaptation regime is imagined and

performed. Perhaps their rice paddies have given way to shrimp ponds or the embankments protecting them have been torn down and the land has disappeared altogether. Yet the geography of this adaptation regime is not restricted to these villages. Much of the work to forge the regime itself takes place far from Bangladesh’s coast—in Paris, Dhaka, and elsewhere. It is through the dialectical exchange between the ongoing transformations of the coastal ecology and the epistemic rendering of what its future can and should look like that the region itself is transformed.

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Notes

1. I do not use real names in this article to protect the identity of research informants. Where disclosing names of organizations threatened individuals’ anonymity, they were also concealed.
2. Although these movements are composed of a great variety of autonomous and heterogeneous rural collectives, many of them are organized under the banner of

- or with the support of Nijera Kori, a national movement of landless peasants.
3. In this article, I am concerned with the adaptation regime in its historical and geographical specificity in Bangladesh. This analytical lens is at once deeply localized and profoundly transnational, as the adaptation regime both shapes and is shaped by a global geopolitics of capitalist development. In this sense, it is grounded in a methodological tradition that recognizes the need to construct an understanding of global phenomena through attention to historically and geographically specific social processes (McMichael 1990; Hart 2002). Although the adaptation regime nevertheless involves a variety of global actors and sites of production, it is beyond the scope of this article to examine the global totality of its local manifestations.
 4. The “basket case” comment has regularly been attributed to Kissinger, although Lewis instead credits Ural Alexis Johnson, then a U.S. undersecretary of state for political affairs (White 1999; Lewis 2011).
 5. In this sense, the analysis here draws on McMichael’s (2000) method of incorporated comparison.
 6. By *common sense*, Gramsci referred to the practices of cultural hegemony through which the political and ideological status quo is perpetuated.
 7. On the performance of vulnerability in service of climate change adaptation, see Farbotko (2010a), Haalboom and Natcher (2012), and Webber (2013).
 8. See, for example, Oxfam (2010), Mifflin (2013), Voysey (2015), Derrington (2015), and Kroodma (2015).
 9. In particular, they know that the effects of climate change will be disproportionately experienced by residents of countries such as Bangladesh that bear the least responsibility for the global emissions of greenhouse gases.
 10. See also Bassett and Fogelman (2013).
 11. On the Climate Smart House as a spectacle of securitized visions of climate futures, see Cons (forthcoming).
 12. Goldman has described similar techniques and politics of mapping administered by the World Bank in the Lao People’s Democratic Republic (Goldman 2005, 181–82).
 13. In 2015, 66 percent of the population was rural, down from 95 percent in 1960 (World Bank 2017).
 14. Abundant ethnographic evidence notwithstanding, reliable demographic statistics for migration from Khulna are difficult to ascertain largely because of the wide variety of both formal and informal migration patterns, including both circular and permanent outmigration. For example, although ethnographic evidence clearly indicates significant migration to India, the Bangladeshi government officially denies this migration flow, owing to the contentious border politics between the two countries. One foreign researcher told me that he and his team knew from their surveys in Khulna that there was significant outmigration and they suspected many of these migrants were going to India, but in the absence of a cross-border demographic study, they could not tell how many, and this migration therefore was not reflected in their publications on the topic. Two other Bangladeshi researchers from different research institutes told me that their organizations had survey data indicating significant migration from Khulna to India but that they would not publish these data because of the aforementioned politics between the two

- countries. The Bangladesh Bureau of Statistics (BBS), in their 2016 study of international remittances, reported that Khulna received the lowest average remittances in the country, but among the rankings of countries from which migrants send remittances back to Bangladesh, India is not even listed (BBS 2016a). Despite these gaps in available data, the net population decline in Khulna’s Paikgachha district reported between 2001 and 2011 (from 249,000 to 248,000) suggests that shrimp farming is contributing significantly to rural outmigration (BBS 2016b).
15. This difference in estimates of labor requirements in agriculture versus shrimp production systems might be the result of differential success with shrimp production in different villages in this region. It could also reflect villagers’ subjective assessments of the desirability of and remuneration for aquaculture labor, expressed as a reduction in available work.
 16. These findings are confirmed by my own research, as well as Datta (2006), among whose respondents 90.7 percent cited decreases in vegetation due to shrimp cultivation.
 17. On anticipatory modes of governing in an urban context, see also Zeiderman (2016).

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