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CHAPTER

Access Failure: Deep Explanation of Climate-Related Crises

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Abstract

In the 1950s and 1970s, Josué de Castro and Amartya Sen showed that hunger and famine are not caused by mere food availability decline; indeed, during most modern times of hunger and famine, there was enough food for everyone. Food crises stem from maldistribution and well-functioning markets that allocate food away from the hungry. Sen shows that people cannot obtain enough food when their entitlements (legal means), made up of assets (land, labor, cash, stocks) and social protections (formal and informal networks of support), are inadequate—“entitlement failure.” Climate’s relation to crisis is now similarly misunderstood. Today, we often describe crises—hunger, famine, dislocation, or economic loss—as outcomes of climate change or extreme weather. Yet these crises are not caused by mere weather. The damage is enabled by the human vulnerabilities that weather finds in place. Building on Sen’s entitlements approach, this chapter explores, via a case of dangerous emigration from the Sahel toward Europe, how to identify the deep roots of crisis by starting with and tracing chains of causality from instances of “access failure”—moments in which people fail to access the necessities for security or for fulfilling their aspirations.

Keywords: [access](#), [climate change](#), [entitlements](#), [vulnerability](#), [security](#), [adaptation](#)

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The contention that famine results from a kind of natural law has no basis in scientific knowledge.

—Josué de Castro (1952, 12)

Access to the state is a precondition for membership in the African bourgeoisie with the state exploiting peasants through extra-economic coercion. In this context, democratization must remove the strait-jacket which stifles the peasantry, because any popular movement to transform political life must sever the hold that ruling classes exercise over rural producers.

—Michael J. Watts (1991, 25)

Introduction

Over forty years ago, Amartya Sen (1980, 620) observed that “food availability is certainly among the influences affecting starvation. But there are reasons for disquiet about this focus on food, and the importance attached to it to the exclusion of other variables.” People who do not study food security often still believe that famines are caused by food shortages. Yet this belief has become even more implausible in the years since Sen (1980) demonstrated that modern-era food crises unfold where there is more than enough food for everyone.

Today, it seems to many that the disasters that follow climate events are caused by the weather—or by changing weather. As with famine, however, though climate is certainly associated with crises, there are many “reasons for disquiet” about the current focus on climate as the cause. Indeed, there is now an attention attached to climate change “to the exclusion of other variables” (Sen 1980). Even though many now recognize complex social and political-economic causalities, this myopic view of the causes of crises remains widespread—in climate-change-impact modeling, policy circles, and journalism (Cottier et al. 2022; Lahsen and Ribot 2021).

Shallow explanations of famine misguided and hindered famine prevention and response. Simplistic assumptions about crises that follow climate events have the same effect. They hide the many causes of, and, thus, potential protections against, crises. While de Castro (1952) had already observed the multiple social causes of famine and the ways that a narrow focus on food availability obscures other causes, Sen’s (1980) work galvanized modern attention to other causes.

In more recent years, even the United Nations Office for Disaster Risk Reduction (UNDRR) has understood that disasters are not natural. They stem from preexisting vulnerabilities that enable a climate event to push people over the edge into crisis. So, this argument, made for environment-related crises in 1976 by O’Keefe, Westgate, and Wisner, appears to have gone mainstream—it is now integrated into the Sendai Framework for Disaster Risk Reduction¹ (United Nations Development Programme 2015).

Yet the analysis of root causes has not been widely used in climate change circles, and the response to disasters remains anodyne. In most instances “vulnerability” is being used only as an indicator of who is at risk, rather than an analytic of root causes of crisis (see IPCC 2014, 2012). So, how do we conduct a full, deep social analysis of the causes of climate-related disasters (a la Watts 1983a; Blaikie et al. 1994; Wisner et al. 2004)? We start with the disasters, by understanding the fragilities they reveal, and then trace out the causes of these fragilities.

Following Sen’s (1984, 312), “consequentialist” view, unacceptable outcomes, such as famine, should move us to question even the institutions and arrangements that cause them—institutions and arrangements that society often assumes to be natural and efficient—such as free markets.² Indeed, Sen shows that markets that are operating efficiently cause famines by allocating food away from the poor and hungry—as they have no effective demand. To transform consequentialism into a method of analysis, following Sen, I take what I call a “problem-oriented” view by starting with unacceptable outcomes, the “problems,” and asking about the chains of causality that produced them.

Framing causality as “entitlement failure,” Sen (1981, 1984; also see Drèze and Sen 1989) laid the groundwork for analyzing the causes of vulnerability to hunger and famine. *Entitlements* are the total set of rights and opportunities with which a household can command—or through which it is legally “entitled” to obtain—different bundles of commodities. These are the legal means of accessing commodities. In short, a household’s assets—stores of food or things they can trade for food or use to produce food—buffer its members against food shortage (Swift 1989, 11). Yet a person’s entitlements can be inadequate or fail.³ So that household does not have the legal means or, shall we say, the rights to attain sustenance.

The very fact that “entitlements” can fail—that people can go hungry or die in the context of legal and socially accepted market arrangements—led Sen to question free markets and moved him to push for regulation and intervention. Yet Sen’s analysis of markets as cause of crisis does not go far enough. While trade can allocate food away from the hungry, we can’t take the initial condition of household assets as a given. The position from which households trade also has causes. Long histories of exploitation and unequal exchange, as well as more recent land grabs (Borras et al. 2018, 2021), enabled and twisted by hierarchies of access to representation, rights, and resources, can shape the distribution of the assets people have before they even enter into an ostensibly “free” market. We must question not only the operation (and naturalized legitimacy) of markets, but also the origins of the distribution of access to land and other key complementary assets.

So, what causes the observed outcomes, the abhorrent events such as famine or displacement? Causal analysis can link the distributions and the security of held assets to human action and institutions, and can judge them to be responsible or change them to improve outcomes (or both). An empirical causal analysis extends the judgment from consequence to cause; making it possible to weigh and judge the causal chain behind the loss and damage. Causes of damage, pain, or suffering can be linked to social and political-economic structures, intentions, or negligence (Calabresi 1975; Hart and Honoré 1959), and with these

insights, moral judgment of causality can then be a matter of public debate. Through understanding the deep root causes, the public debate can be extended to the weighing of the role of individual or public agency or interest behind the cause. In this manner we can identify the full range of causes that can be part of remedy and improvement, while also attributing blame and responsibility (see Ribot 2022).

The analysis of the causes of any deprivation, such as hunger or loss, is the analysis of access to necessities—via access to resources, markets, authority, and political representation. This chapter turns to “access” analysis (à la Ribot 1998; Ribot and Peluso 2003) as a means of understanding the causes of vulnerabilities to hunger, famine, dislocation, economic loss, or any other damage in the face of climate variability or change. In this frame, hunger, famine, or dislocation in the face of a climate event or climate change is an “access failure”—failed access to land and failed access to many other complementary rights, institutions, infrastructures, and resources.

Entitlement Failure to Access Failure

Access and negotiation over natural resources must be facilitated among many actors who compete for them, and local social and environmental problems must be seen in the context of broader patterns of influence and change.

—Claude Raynaut (2001, 9)

The move toward access analysis is a shift from explaining only hunger and famine (the focus of entitlements analysis) to analyzing a broader set of losses and damages (or even of gains and benefits). That is, access analysis focuses on any chosen “problem,” defined as a loss or a hindered attainment of something valued. It is also a shift from an obsessive focus on food availability decline (often referred to as “FAD”) in the analysis of famine, or from the climate hazard in the case of current weather extremes, to an analysis that can overturn climate as the specious sole causal focus in the many current crises that are now being attributed to climate and climate change. Further, it moves us from a proximate or shallow individualized neoclassical analysis toward a broader and deeper structural and political-economic analysis (as has been practiced by de Castro 1946, 1952; Galtung 1969; Watts 1983b; Blaikie 1985; Fine 1997, 633; de Waal 1997; Devereux 2000, 27; Wisner et al. 2004; Somers 2008; Colette 2016, among others).

In the agrarian world, access to land is a key element of access to various assets and relations that could spell security. This access goes far beyond legal land title. *Entitlement* is a concept based in notions of legal *right*—the right to have endowments and assets. It entitles one to various things. Access is broader than this because it is a descriptive or empirical notion of the *ability* to attain the benefits from things (Ribot and Peluso 2003). This “ability” is much broader than “rights.” Rights claims are enforceable—by law, custom, or convention. They imply social contracts that underpin the plausible ability to have others support one’s claims—to have or to be or to do—in the world. Ability is broader because it can also include attainment by force, violence, and stealth, in addition to law, custom, and convention, and all of the identities and structures that enable one to attain benefits—such as food, or protection from extreme weather or a virus. The boundaries of the legal are fluid; they can be reconfigured by political movements, social pressures, violence, or force—depending on social conditions that configure and reconfigure property relations (Watts 1991; Fine 1997; Lund 2020).⁴ Assets—and the law—are not a fixed starting point. Indeed, such legalized concepts as “citizenship” can determine (via class, caste, ethnicity, religion, gender, age, history, place of origin etc.) who has and who does not have the rights that law affords (because even access to legal belongings, freedoms, rights and recourse matter, à la Somers 2008, 5; Agamben 1998).

In his work on “capabilities,” Sen (1984) made a similar shift from a legalistic focus to a focus on outcomes. The focus on outcomes, the consequentialism noted above, enabled him to evaluate consequence in terms of human rights beyond mere legal rights—as the legal rights were systematically precluding these human rights. Without exploring the causes of these outcomes, beyond the proximate functioning of markets, Sen developed concept of capabilities—the valued doings and beings that entitlements enable—to critique the economic model without discarding it. He showed how markets can harm those in need, yet he did not call into question the origin of the distributions of endowments and assets that had created the initial conditions of inequality and were part of the precarity of some social strata. His micro focus enabled a detailed analysis of why some were capable of meeting their basic needs, and others were not. Entitlements could not, however, explain the origins of the initial distributions that had enabled skewed capability

outcomes. He did add to his analysis the role of such institutions as elections and free media—as means by which people could shape the legal environment in which they lived. But he remained neutral on social movements and other forms of power outside of the vote. Watts (1991), however, modulated to a more-structural frame by introducing empowerment as the ability to influence the political economy that forms entitlements.

In his consequence-sensitive approach, the consequence Sen is most concerned with is “freedom”—freedom from and freedom to; in particular, the freedom from poverty and the freedom to “be” and “do,” to “function” to achieve desirable outcomes (Sen 1984). These freedoms require food entitlements as a necessary condition—because, in his model, laws and markets shape access to these necessities. Broader desired outcomes, of course, also require freedom from oppressive regimes, social stigmas, skewed cultural norms, and petty theft, as well as state and structural violence. Thus, capabilities broaden attention beyond mere legal individual ownership and shift the moral obligation from the individual to society. The notion of “entitlements,” if taken at face value (without consequence sensitivity), implicitly legitimizes, or at least accepts, any existing distribution of property while occluding nonlegal, extralegal, and illegal forces. Nevertheless, Sen’s framing, his analysis of entitlement failure, gives us a strong basis for accounting for immediate micro determinants of hunger. Sen’s approach is ultimately an individualist microeconomic frame. As Fine (1997), however, states, “The micro-foundations of the entitlement approach are to be rejected because of their inability to address satisfactorily the social relations and structures through which famines are fundamentally caused” (630). Capabilities get us part way to a broader multidimensional view. But because capabilities do not engender a causal analysis of initial distributions, since they are set up to justify a moral position, a deeper access analysis is needed to empirically interrogate *why* people do or do not achieve different desired outcomes—this is about why they have the endowments and assets that they have. This is partly due to previous “entitlements,” but also partly due to a broad range of other factors—that include identities, belongings, extramarket social relations, violence, theft, and so forth.

A broader and deeper empirical view of the causes of hunger or of the damages that follow climate events, in contrast to entitlements and consistent with capabilities, would frame assets as depending on the “ability” (as supported by rights and other structures or powers), rather than just the “right,” of the household to produce a surplus that it can store, invest in productive capacity and markets, and use in the maintenance of social relations (see Scott 1976; Berry 1993; Ribot 1998; Ribot and Peluso 2003). These assets and extended entitlements are the means of achieving capabilities. Rights-based, entitlement approaches and rule of law are not everything—they only include the enforceable claims. Access theory—explaining the *ability* of people to benefit from things—provides fuller empirical (rather than only legal-focused) analytic of what people are able to obtain and use via legal, illegal, and other relational means of obtaining things and benefits. Ability is also broader than capacity insofar as it is not merely about the innate characteristics of those at risk—ability is a manifest characteristic rather than a potential. Access analysis is about all observable and imputable factors that enable and disable benefit. Access theory focuses on the ability to benefit from tangible and intangible things, including material assets, knowledge, ideologies, discourses, doxas, habitus, social relations, social status, social structures, legal and political structures, stealth, and violence (see Ribot and Peluso 2003).

Vulnerability in an entitlement framework is the risk that a household’s alternative commodity bundles will fail to buffer them against hunger, famine, dislocation, or other losses. This is not a risk of “entitlements failure” to Sen; but is a risk of “access failure” (failure to access or enjoy the benefits of these alternative commodity bundles) in an access framing. Vulnerability is a relative measure of the household’s proneness to such failure (Downing 1991; also see Downing 1992; Watts and Bohle 1993, 46; Chambers 1989, 1). By starting with the components of an “entitlement” framing (that is, production, investments, stores, and claims) of what enables households to maintain food consumption, an access framework allows us to analyze the causes of food crises. Analyzing chains of the factors that produce household crises reveals a whole range of proximate and distal causes—hopefully, signaling potential policies to reduce vulnerability (Blaikie 1985; Turner, Matson et al. 2003; Turner, Kasperson et al. 2003). This social model applied to instances where climate events are associated with food crisis replaces ecocentric models of natural hazards and environmental change (Watts 1983a). By showing a range of causes, legal, illegal, or structural, environmental stresses are located among and their role explained within other material and social conditions that shape household well-being. For example, there may be hunger during a drought because of privatization policies that limit pastoral mobility, making pastoralists dependent on precarious rain-fed agriculture (Franke and Chasin 1980; Smucker and Wisner 2008; also see Leichenko and O’ Brien 2008).

Household-based social models also illustrate how important it is that assets are sufficient to cope with or adjust to (as in buffer against) environmental variations and changes, so that land-based production activities are not undermined by and do not undermine the natural resources they depend on (Blaikie 1985). Household models, however, often fail to account for intrahousehold gender and age differences in production, consumption, and reproduction; so internal household struggles must be made an explicit part of any complete analysis. Gender-differentiated access to household food and assets, and to natural resources, jobs, markets, services, and representation, is foundational to household and individual well-being (see Guyer and Peters 1987; Vaughan 1987; Carney 1988; Drèze and Sen 1989; Hart 1992; Agarwal 1993; Schroeder 1999; Turner 2000). If the household models are not fully theorized, they may also miss broader structural relations of production and exchange within markets and a globalized system that shape broader-scale distributions (Polanyi [1944] 2001; Leichenko and O' Brien 2008; Butler 2009; Fraser 2011, 2021). But all of these should be linked into chains of causality by a full, deep, causal analysis of access and of access failures.

In a sense, the most fundamental limit to entitlements is the shallow neoclassical assumption that assets and rules are a given—as if they have no causality, no history. Cause is parked in the lack of assets—and/or lack of the ability to exchange them for food. This is complemented by extended entitlements whose cause can also be located in the failure of social reciprocities or state social protections—the moral and legal social contracts under which people live. Yet the existing distribution of assets and social protections that a storm or drought finds in place have historical antecedents—causes. Entitlements analysis starts with assets and protections. It does not explain them. Access analysis traces back the chains of causality to the structures and relations that produce unacceptable (in a consequentialist sense) distributions that result in hunger, famine, dislocation, and other damages that follow a drought or storm. The conditions of vulnerability—entitlement—are not taken as a given, but as a set of conditions of empowerment and disempowerment and of distributional inequity that have causes.

In this sense, it is important to place entitlement theory within a broader political economy and empowerment approach (Watts 1983b; Watts and Bohle 1993) and links it to Sen's (1984, 1999) capacities and capabilities thinking (also see Bebbington 1999; Yohe and Tol 2002). Bringing together various readings of causality, an access framing also outlines recursive elements of vulnerability analysis by exploring ways in which those at risk shape the political economy that shapes the entitlements behind precarity or security (Watts 1991; also see Ribot 1995, 2014). Emancipatory recursive elements, which are most in need of development, include representation (Sen 1981, 1999; Watts and Bohle 1993; Appadurai 1984; Lappé 2013), structural relations (Polanyi [1944] 2001; Scott 1976; Swift 1989; Watts 1991; Moore 1997; Pelling 2003; Fraser 2021), and discursive effects (à la Beck 1992; Rose 1996; Butler 1997, 2009; Fraser 2000; Luhmann 2002; Agrawal 2005; Wolford 2007; Wilkinson 2010; Connolly 2013). Causal chains (Blaikie 1985) and access theory (Ribot and Peluso 2003) frame the empirical starting point for explaining assets, social protections, and relations of emancipation.

Although they are *triggered*⁵ by climate stress, the evidence is overwhelming that climate-related disasters must be understood in the context of historical, social, and political-economic arrangements that render people secure or vulnerable. This is evident, as the same magnitude environmental event causes quite different damages in the same place as circumstances on the ground improve. In Bangladesh, fatalities were reduced from more than 500,000 to 3,406 deaths between cyclones Bohla and Sidr, which hit the same coastline with a similar storm surge and intensity. The damages were not due to the cyclones, and the reductions were due to planning reforms (Batha 2007; Bern et al 1993; CEDMHA 2007; 7; Government of Bangladesh 2008; MFDMB 2008). There are many examples where the climate events of same magnitude cause very different damage in different places or at different times in the same place. In 1877–1878, more than 400,000 people perished in the Grande Seca, “great drought,” in Northeast Brazil, but a drought of a similar magnitude in the southwest of the United States would not have killed anyone—perhaps some cattle. Damages follow from differences in the conditions on the ground—they do not fall from the sky. Droughts become deadly due to security and options on the ground. The 1943 West Bengal famine was caused by well-functioning markets, not drought or absolute shortage (Sen 1981). The 1959–1960 famine in China was produced by dysfunctional upwardly accountable administration, not drought (Jisheng 2012). The 2011 Somali famine was a product of “interplay of livelihoods, clan and politics,” not drought (Majid and McDowell 2012, 37). The 1,300 fatalities in New Orleans in 2005 resulted from a long history of government negligence, not hurricane Katrina (White House 2006; Somers 2008; Hayes 2009; Bullard and Wright 2009).

Conducting a fully social analysis of the causes of loss or damage—and of crisis on a larger scale—requires tracing causality from that problematic outcome to the multiple factors that impinged upon its occurrence. This is an application of access analysis—an analysis of how a person or a group is deprived of some benefit that they need or desire, how they are deprived of security or made vulnerable.

Access Analysis of Trans-Saharan Migration

On April 19, 2015, a boat from Libya sank off the island of Lampedusa with 729 African migrants onboard; twenty-nine of them survived. Most were from the Sahel, and many came from the forest villages of Tambacounda (or Tamba), where I had worked for the past thirty years. The media immediately labeled them “climate refugees,” as if they had made this risky trip to escape the stresses of climate change. They had not. They had many motivations for taking this journey. Climate was not one of them. The rains in the Sahel had been increasing, not decreasing, for more than twenty years (Biasutti and Giannini 2006).⁶ Although the Sahel is a semiarid region,, there is no reason to believe it cannot easily support those who live there. Nonetheless, there is an annual hungry season—the growing season when stocks run low and the next crop is yet to be harvested. Indeed, this hungry season persists, through good and bad years. Sahelian farmers and pastoralists live in an economy that pushes their income down below subsistence—year after year.

In 2017, Papa Faye and I conducted field research in Tambacounda among the families of those who had perished on the trip (see Ribot, Faye, and Turner 2020). The twenty village-level authorities (Imams and chiefs) we interviewed told us that emigration had gone up significantly over the previous five years and was much higher than it had been ten or twenty years ago. Rising Europe-bound emigration has been reported elsewhere in the Sahel (e.g., Turner and Teague 2019; Turner et al. 2021). These rates of emigration cannot, however, be attributed to climate or climate change—notwithstanding those who label them climate migrants (Friedman 2016; Foote 2016; Rigaud et al. 2018); both journalists and climate scientists are engaged in such attributions (see Cottier et al. 2022; also see Lahsen and Ribot 2021 on attribution).

Indeed, there are widespread reports that the Sahelian ecology is “regreening” or, shall we say, improving rather than declining. We are not seeing desertification, but rather return of forests. Further, maps of food insecurity for Senegal show that food insecurity in the Casamance and Tambacounda regions is higher than other areas in the country where climate change has introduced more variability (Rioux 2011; VAM 2014). Climate change cannot explain the migration we observe. Indeed, Giannini et al. (2017) have shown a distinct mismatch between climate-stressed zones and food insecurity in other parts of the Sahel. In short, we must put the role of climate stress in its proper place and refocus on other causes of out-migration.

Starting from migrants’ decisions to depart, we tried to understand why these young men (and they were all men)⁷ in Tambacounda were choosing to make the perilous journey across the Sahara Desert and Mediterranean Sea. What did these young men have, what did they want, what did they need, what did they lack, and what moved them to go? What made them take this risk? The answers were many. First, we established that they were aware of some of the risks. Many had heard about extortion and theft en route; death in the desert (which is even more likely than at sea); ransoming by Al Qaeda, Boko Haram, Tuareg Rebels, or Libyan Army, who would capture them and call their parents to ask for payments. They knew of slave labor, death at sea, abuses in Europe, and the shame of being repatriated from Libya or Europe. They justified taking these risks by adopting the fatalist position that their fate was written, and God would protect them, despite the elders’ insistence that God does not condone suicide.

We asked these young men about their lives and futures in Tambacounda. They felt a lack of respect, saying they had no role in the family or the community at home. They felt there was no future at in Tamba. They noted the ongoing subsistence crisis—the hungry season and their deep anxiety about feeding their children and parents. The young men told us that they could not marry since families wanted to marry their daughters to men who had migrated and could send remittances back home or men in families with migrants. The migration situation had created a class society of have migrants and have-not migrants. Those who received remittances were not as likely to suffer the hungry season. But the most striking thing was that these young men wanted to contribute to life at home and felt they did not have the means to do so. They wanted to be in and live in Tambacounda but to do so with dignity and respect. They could not find this. One aspiring migrant said, “Here there is no life.” His statement was mirrored by others, who would

say on departure “Barsa walla barsak,” meaning “Barcelona [Europe] or death.”⁸ They were saying that they would risk dying in transit rather than living the social death they felt by staying at home.

The decision to migrate seems driven by these sentiments. But the situation would be quite different were it not for widespread material precarity. The youth attributed the hopelessness they felt to their economic conditions and prospects. Each sector—peanuts, millet, cotton, maize, charcoal, and labor—left most of them below subsistence. Interestingly enough, these people have assets. Land is not scarce in this rain-fed agricultural zone. The surrounding forests are hunting grounds, and stock many other products. These farmers have land, forests, and their own labor. They have some equipment. There are even formal social services in place. What they lack, however, is *fair access* to the surrounding forests, the markets, and to government services. Land rights in this region are not a key issue—as land is abundant (we will return to the topic of abundance and land development later.) Nor is it the poorest who emigrate. Those who depart are able to save enough to start the trip (Ribot, Faye, and Turner 2020; Bredeloup and Pliez 2005, 13). Many also had remunerative jobs (see Robin, Lalou, and Ndiaye 2000, xxiii). In short, the reasons for their departure seem to turn on long-term hopes and experiences rather than immediate deprivations.

Charcoal and cotton production and access to services (Ribot 1998; Faye 2017; Faye and Ribot 2017) provide good examples of socially stratified access to natural resources and other goods. Forest access is restricted by the forest service. A license is required for transporting forest goods to markets. These licenses are issued by the forest service to urban merchants, which enables the formation of a merchant oligopsony that sets prices and reaps virtually all the sector’s profits. There are further layers on access to licenses, as this is a function of the merchant’s ethnic identity and wealth, factors that shape their access to government. Indeed, there are many other ways, including permits for cutting and various credit arrangements that skew access to forest-sector profits (Ribot 1998; Faye 2017). In our study of Tambacounda (Ribot 1998; Ribot, Faye, and Turner 2020), we found that the cotton sector was under the control of one monopoly buyer. This buyer set the prices. Here, having to purchase cottonseed, fertilizer, and pesticides on credit left many farmers in debt after the production season. Further, when farmers and pastoralists need veterinarian and medical services from the government—which, ostensibly, are subsidized—they are made to pay full market price, which they cannot afford. Services are effectively denied.

Agricultural land comes into this picture as the basis of livelihoods, but also as an underdeveloped and abundant resource. The enormous agricultural potential of the Tambacounda Region, touted by the Statistical Bureau of the Government of Senegal (see Sane and Diallo 2019, 50), makes agricultural development attractive. Sane and Diallo cite the FAO’s Global Environment Fund’s focus on “integration of climate resilience in agropastoral production for food security in vulnerable rural zones” (51). But why is climate the issue only now? Why is it even necessary as a justification for long-needed investments? Water availability in the zone has been known to require infrastructure development for a very long time (Franke and Chasin 1980 and Raynaut 1998, who both remark that there has also long been famine in the region, yet vulnerability is not addressed). Further, climate change, as noted above, is not yet, even if it may soon be, a major issue in the Tambacounda region. The issue is not climate change but a long-standing failure to invest in developing the productivity of the land (that is, as Brottem and Brooks 2018, 124–125, note, “negligent government policies” and “a lack of externally supported infrastructure”). Tambacounda has not been given access to the kind of essential infrastructure that has long been developed in Senegal’s northern Région du Fleuve along the Senegal River.

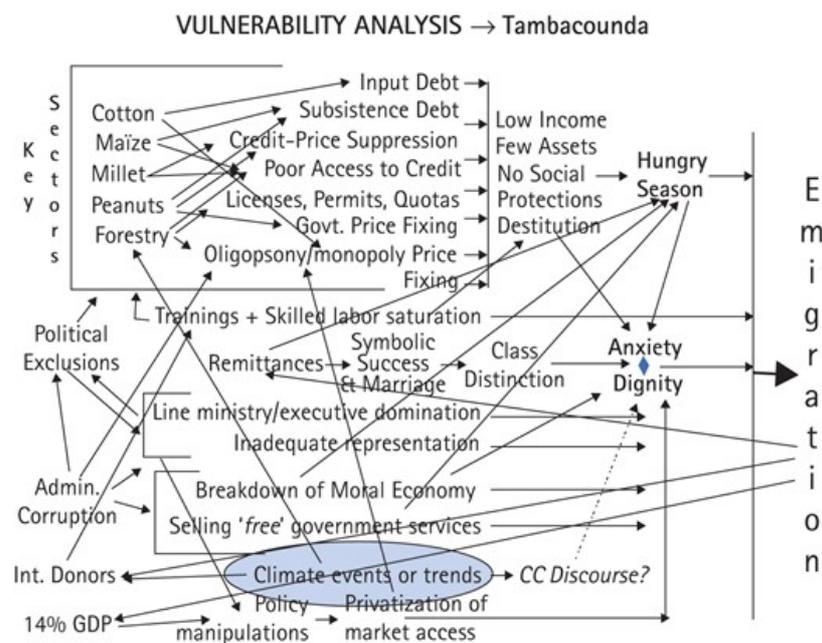
Land in the rain-fed drylands of Tambacounda is abundant. Without irrigation, however, the land remains unattractive to outside investors or for government infrastructure projects. Indeed, at the expense of regions like Tamba, there is a long history of development initiatives being “concentrated particularly in large zones devoted to commercial agriculture” (Raynaut 2001, 16; 1998). Papa Faye, a fellow researcher in Senegal, notes that irrigation in Tamba is more expensive than in the North (pers. comm. 2022), and thus has a lower return on investment for government or for agrobusiness. Although the Falémé or Gambia Rivers run through Tambacounda, the topography does not allow for gravity-fed irrigation systems, so that pumping stations would be required. However, Senegal’s North, along the Senegal River, is gravity irrigated, and so infrastructure is less costly. Cheap labor from Tamba now serves the North—as the lower productivity in Tamba has cheapened Tamba’s labor. Investment has been in places where the returns are higher, rather than where needs are most acute.

Tamba is also farther than the Northern regions from Senegal’s market center, Dakar, making Tambacounda less commercially competitive for agricultural development. The government made the

choice to invest in the North in the 1960s, leaving Tamba behind. Big agrobusinesses can now be found in the North. So, the key land question is one of subnational regional investment politics. Investing in Tamba, we can hypothesize, could have a positive return but less than elsewhere in Senegal. Investing in Tamba would also give labor a reason to stay, reducing the supply of cheap labor to the North. Tamba, it seems, serves as a cheap labor reserve for other parts of Senegal and for Europe. The state has chosen—following either a strictly market logic or a skewed developmentalism—to leave Tamba behind. In this case, Tamba’s land could have more value with higher productivity, but without access to infrastructure investments, the farmers of Tamba cannot benefit; they do not have access to the more-stable production that irrigation could provide. Young men see their families struggling, see little hope for the future, and leave.

These are just some of the factors that shape the assets, endowments, rights, and economic context in which youth in Tambacounda decide to depart. Figure 1 provides a fuller picture of the factors at play. Their entitlements are clearly failing, caused by a broader access failure—made visible by a deeper analysis of access. They may have land and labor, but they cannot enjoy the profits from their own productivity. In addition, when asked what they can do, youth feel disenfranchised. They do not see any way to influence the political economy that shapes their precarity. Left feeling hopeless, they choose between *Barcelona* and *death*. The political economy of material deprivation and marginality shapes their expectations of marriage, jobs, and respect, and their feelings of exclusion or disenfranchisement. Farmers and pastoralists do not have access to resources, markets, development investments, representation, or any of the basic necessities that would make life in Tambacounda feel secure. So, while emigration is a decision, it is a decision made in the face of material deprivation. It is no surprise that none of those we interviewed mentioned climate or climate change as a cause of their emigration choice.

Figure 1.



Schematic diagram of the many social and political-economic factors shaping young Sahelian farmers’ and pastoralists’ decision to take the risk to emigrate from Senegal across the Sahara and Mediterranean toward Europe.

Conclusion

The ostensibly climate-related migration from the Sahel toward Europe starts at the confluence of access failures at home (Ribot, Faye, and Turner 2020).⁹ The case study of Tambacounda progressively contextualizes the access failures that result in departures. Departure can be read as a moment of lost security because migration involves great risk. It is a moment when young men’s vulnerabilities to hunger and hopelessness at home are transfigured into vulnerabilities to loss, insult, abuse, slavery, and death in the desert or at sea.

Departure can also be viewed as a means of access to a benefit because it involves a spark of hope and the promise of a potential role in family life via remittances, and the respect this brings—the need for hope and dignity is part of the cause of the vulnerabilities they take on as migrants. The Tambacounda case shows

that material access failures at home, which date back to colonial and postcolonial failures to invest in Tembacounda's productivity and security, shape decisions that usher young men into new dangers in search of a future.

Access failure, illustrated in the Tambacounda case, is broader than entitlement failure. It can identify the social, political-economic, and institutional production of the precarity we hope to reduce. Access analysis can identify the proximate and distal, immediate and long-past, direct and structural, and shallow and deep, as well as legal, extralegal, and illegal causes of deprivations and attainments (see Ribot and Peluso 2003). Here I use the term "deep explanation," or "deep causality," simply to contrast it with the all-too-common "shallow" forms of causal analysis, which assume initial conditions (as in economics and in much climate 'impact' modeling) or focus on what's countable at the expense of the things that count (as with computational approaches, see Cottier et al. 2022). Causes of access failure must draw on many methods—from process tracing to statistics, focusing on everything from micro-decisions to macrostructures—to produce a fuller and deeper accounting.

The decision to depart is as an act of agency within structures. It is, ironically, a way for young men to take their fates into their own hands, in the name of a fatalism that relies on God's will and protection. This is also the moment of crisis at which vulnerability to death in the desert and at sea, and to insult and injury en route, are made materially likely, and risk is taken on by departing bodies. Here structure and agency work together via a set of discursive and recursive interactions between affect and materiality (Ribot 2014, 2022). The failed ability to access resources, markets, and the state is, among other causes, a product of failed rights to use resources (as allocated by the forest service), organization of the market (permits, oligopsony and monopsony, social ties), and relations to government (as those of the charcoal merchants versus peasant producers). Such failures fit into a long history of failed access to agricultural infrastructure investments because of the privileging of the most lucrative zones for development over human security in the more marginal zones, where the return on investments would still be positive. These failures are embedded in failed ability of peasant farmers and pastoralists to influence rights—that is, to shape the political economy that shapes their vulnerabilities—via emancipation or representation (see Watts 1991). Agency, nevertheless, takes place within and shapes these arrangements (viz Weheliye 2014). These arrangements shape the scope of agency.

Analysis of access failure involves tracing the causes of crises from the moment of loss (death at sea, slavery in Libya, the hungry season, lack of dignity, lack of hope) to the decision to depart, the social and political-economic roots of the material conditions at departure, to the multiscale causes of those conditions, and, ultimately, to what society can and should do to prevent losses and damages. Those include any arenas in which society can respond, could have responded, and thus should have acted to prevent crises (Ribot 2022)—such as infrastructural development, the restructuring of market access (permits and licenses), and price supports. These causal links can lead to biophysical-infrastructure phenomena that are within human ability to control, protections from the biophysical world that could have been implemented or developed, the building of buffering assets for those who are marginalized by social or economic systems, the reform of those systems, or any other social actions that society agrees should be in place. We learn what these are by tracing out, across space and back through time to the human actions and inactions that generate pain and suffering, and could also be turned toward well-being and security. The process does not stop at entitlements; it goes deeper to explain the accumulation and dispositions behind them.

Sen's (1984) capabilities approach provides us with a moral metric for achieving the minimum of what he calls "functionings," or the desired beings and doings that people *should* have access to via access to the means for achieving them.¹⁰ Access analysis helps us understand why people do or do not achieve basic capabilities and greater aspirations. Ironically, while departure does, for those few who make it to Europe, fulfill some sense of hope for dignity and respect at home—a kind of coming of age, for having reached a seemingly promised land—the misery, disrespect, racism, menial work and, perhaps, disillusionment found on arrival, hardly reflects laudable capabilities or the achievement of the desired being or doing. The beings and doings this voyage does enable access to include a recognition that obviates the initial hope at the cost of great risks and hard labors in the desert, Libya, the sea, and in Europe (also see Turner, Ribot, and Moumouni 2022; Turner et al. 2022).

Indeed, following Nussbaum (2001), migrants' achievement can be viewed as preferences that reflects a derisively low expectation for self, in which they have "chosen," and are perhaps even "content" with, one set of sufferings over another. These low expectations also need explanation in a political-economic frame

(such as the misrecognition addressed by affirmative action in the United States, à la Fraser (2000, 2007). Indeed, while neoclassical economists may shy away from accounting for taste, and the mere act of having made a “choice” might even feel just to old Pareto (and Bentham), the consequences are still “reprehensible” (Sen 1984). Sen’s consequentialism brings us back to the basic question of the acceptability of initial conditions and why anyone tolerates them. Does tolerance reflect the false consciousness associated with Marx (Lukács 1923), Gramsci’s (1971) hegemony, Bourdieu’s (1972) habitus, Foucault’s (1977) subjectivities, Nussbaum’s (2001) entrenched preferences, Taylor’s (1994) or Fraser’s (2007) misrecognition? Is it simply resignation to Agamben’s (1998) bare life, or is it Weheliye’s (2014) more-affirming life within the margins of deprivation and oppression?

Osmani (2005) considers poverty to be a deprivation that is a human rights abuse. It seems the departure from the Sahel is driven by and arrives at other reprehensible conditions that must be viewed as abuses—as poverty is not the only driver. To trace causality, because we judge these outcomes to be unacceptable, leads us to responsibility and blame, and perhaps response in repairs or reparations. Asking where the initial distributions come from by interrogating the origins of accumulation and deprivation have always been contentious questions as they point fingers toward individuals and institutions that are or serve powerful beneficiaries. The vulnerabilities lived, the risks taken, and gains achieved reflect failed access to basic human rights. So, we still need to account for both what is found to be worth achieving and how access to the means of achieving it is either established or denied.

Concerning the deep causes of crisis, causes of climate-related disasters, we must still interrogate how and why broader understandings of causality—those pointing toward root causes—are continuously pushed aside. There is a politics of knowledge concerning what is in and out of public focus—how and why different analytics are chosen that frame in or out different causes (Cottier et al. 2022). Yet, no matter what, in a problem-oriented approach, we need to keep unacceptable pain and suffering at the center, and we need to ask the contentious question of what caused this and what could have and can be done—keeping consequentialism central. A deep analysis makes evident factors and processes that are not visible to the naked eye. What is apparent or seems obvious is not always true or right. Indeed, by focusing on “deep” analysis and explanation we can distinguish our work from the “shallow” analyses that are so common.

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References

Agamben, Giorgio. 1998. *Homo Sacer: Sovereign Power and Bare Life*. Stanford, CA: Stanford University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Agarwal, Bina. 1993. "Social Security and the Family: Coping with Seasonality and Calamity in Rural India." *Agriculture and Human Values* 17 (3): 156–165.

[Google Scholar](#) [WorldCat](#)

Agrawal, Arun. 2005. *Environmentality: Technologies of Government and the Making of Subjects*. Durham, NC: Duke University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Appadurai, Arjun. 1984. "How Moral Is South Asia's Economy? A Review Article." *Journal of Asian Studies* 43 (3): 481–497.

[Google Scholar](#) [WorldCat](#)

Batha, E. 2007. "Cyclone Sidr Would Have Killed 100,000 Not Long Ago." Alertnet [online], November 16. UNEP (United Nations Environment Program). 2009. *New Science and Developments in our Changing Environment*. Nairobi: UNEP.

Bebbington, A. 1999. "Capitals and Capabilities: A Framework for Analysing Peasant Viability, Rural Livelihoods and Poverty." *World Development* 27 (12): 2021–2044.

[Google Scholar](#) [WorldCat](#)

Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London: Sage.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Bern, Caryn, J. Sniezek, G. M. Mathbor, M. S. Siddiqi, C. Ronsmans, A. M. Chowdhury, et al. 1993. "Risk Factors for Mortality in the Bangladesh Cyclone of 1991." *Bulletin of World Health Organization* 71 (1): 73–78.

[Google Scholar](#) [WorldCat](#)

Berry, Sara. 1993. *No Condition is Permanent: The Social Dynamics of Agrarian Change in Sub-Saharan Africa*. Madison: University of Wisconsin Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Biasutti, Michela, and Alessandra Giannini. 2006. "Robust Sahel Drying in Response to Late 20th Century Forcings." *Geophysical Research Letters* 33: L11706. doi:10.1029/2006GL026067.

[Google Scholar](#) [WorldCat](#)

Blaikie, Piers. 1985. *The Political Economy of Soil Erosion in Developing Countries*. London: Longman Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Blaikie, Piers, Terry Cannon, Ian Davis, and Ben Wisner. 1994. *At Risk: Natural Hazards, People's Vulnerability, and Disasters*. London: Routledge.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Borras, Saturnino M., Jr., Jennifer Franco, Clara Mi Young Park, Mads Barbesgaard, Yukari Sekine, Ye Lin Myint, Thant Zin. 2018. "The Twin Challenge of Agrarian and Climate Justice: Connections and Contradictions between Climate Change Mitigation Politics, Land Grabbing and Conflict in Myanmar." Transnational Institute (TNI) Working Paper Series, February 25.

Borras, Saturnino M., Jr., Ian Scoones, Amita Baviskar, Marc Edelman, Nancy Lee Peluso, and Wendy Wolford. 2021. "Climate Change and Agrarian Struggles: An Invitation to Contribute to a JPS Forum." *Journal of Peasant Studies*, 49(1): 1–28. doi:10.1080/03066150.2021.1956473.

[Google Scholar](#) [WorldCat](#)

Bourdieu, Pierre. 1972. *Outline of a Theory of Practice*. Cambridge, UK: Cambridge University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Bredeloup, Sylvie, and Olivier Pliez. 2005. "Migrations entre les deux fleuves du Sénégal." *Autrepart* 36: 3–20.

[Google Scholar](#) [WorldCat](#)

Brottem, Leif, and Bonnie Brooks. 2018. "Crops and Livestock under the Sun: Obstacles to Rural Livelihood Adaptations to Hotter Twenty-First-Century Temperatures in Eastern Senegal." *Land Degradation & Development* 29 (1): 118–126.

[Google Scholar](#) [WorldCat](#)

Bullard, Robert D. and Beverly Wright, eds. 2009. *Race, Place, and Environmental Justice after Hurricane Katrina: Struggles to Reclaim, Rebuild, and Revitalize New Orleans and the Gulf Coast*. Boulder, CO: Westview Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Butler, Judith. 1997. *Excitable Speech: A Politics of the Performative*. London: Routledge.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Butler, Judith. 2009. *Frames of War: When Is Life Grievable?* New York: Verso.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Calabresi, Guido. 1975. "Concerning Cause and the Law of Torts: An Essay for Harry Kalven, Jr." *University of Chicago Law Review* 43 (1): 69–108.

[Google Scholar](#) [WorldCat](#)

Carney, Judith. 1988. "Struggles over Land and Crops in an Irrigated Rice Scheme: The Gambia." *Agriculture, Women and Land: The African Experience*, edited by Jean Davison, 59–78. Boulder, CO: Westview Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

CEDMHA (Center for Excellence in Disaster Management and Humanitarian Assistance). 2007. "Cyclone Sidr Update." November 15.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Chambers, Robert. 1989. "Vulnerability, Coping and Policy." *IDS Bulletin* 20 (2): 1–7.

[Google Scholar](#) [WorldCat](#)

Lund, Christian. 2020. *Nine-Tenths of the Law: Enduring Dispossession in Indonesia*. New Haven: Yale University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Colette, April L. 2016. "The Politics of Framing Risk: Minding the Vulnerability Gap in Climate Change Research." *World Development Perspectives* 1: 43–48.

[Google Scholar](#) [WorldCat](#)

Connolly, William E. 2013. *The Fragility of Things: Self-Organizing Processes, Neoliberal Fantasies, and Democratic Activism*. Durham, NC: Duke University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Cottier, Fabien, Marie-Laurence Flahaux, Jesse Ribot, Richard Seager, and Godfreyb Ssekajja. 2022. "Re-framing the Frame: Cause and Effect in Climate-related Migration." *World Development*. Published online July 6, 2022.

<https://www.sciencedirect.com/science/article/pii/S0305750X22002066?dgcid=author>.

de Castro, Josué. 1946. *La Alimentación en los Tropicos*. Mexico City: Fondo de Cultura Económica.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

de Castro, Josué. 1952. *The Geography of Hunger*. Boston: Little, Brown and Company.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

de Waal, Alex. 1997. *Famine Crimes: Politics and the Disaster Relief Industry in Africa*. Oxford: African Rights and International African Institute/James Currey.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Devereux, Stephen. 2000. "Famine in the Twentieth Century." IDS Working Paper 105. Brighton, UK: Institute for Development Studies.

Downing, Thomas E. 1991. "Assessing Socioeconomic Vulnerability to Famine: Frameworks, Concepts, and Applications." Final Report to the U.S. Agency for International Development, Famine Early Warning System Project, January 30.

Downing, Thomas E. 1992. "Vulnerability and Global Environmental Change in the Semi-Arid Tropics: Modeling Regional and Household Agricultural Impacts and Responses." Paper presented to the International Conference on Sustainable Development in the World's Drylands, Jan 27–Feb 1. Fortaleza-Ceará, Brazil.

Drèze, Jean, and Amartya Sen. 1989. *Hunger and Public Action*. Oxford: Clarendon Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Faye, Papa. 2017. "The Politics of Recognition, and the Manufacturing of Citizenship and Identity in Senegal's Decentralised

Charcoal Market.” *Review of African Political Economy* 44 (151): 66–84.

[Google Scholar](#) [WorldCat](#)

Faye, Papa, and Jesse Ribot. 2017. “Causes for Adaptation: Access to Forests, Markets, and Representation in Eastern Senegal.” *Sustainability* 9 (2): 311. doi:org/10.3390/su9020311.

[Google Scholar](#) [WorldCat](#)

Fine, Ben. 1997. “Entitlement Failure.” *Development and Change* 28: 617–47.

[Google Scholar](#) [WorldCat](#)

Foote, Willy. 2016. “Climate Refugees Are Leaving the Farm Behind.” *Forbes*, July 20.

Foucault, Michel. 1977. *Discipline and Punish: The Birth of the Prison*. New York: Random House.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Franke, Richard W., and Barbara H. Chasin. 1980. *Seeds of Famine: Ecological Destruction and the Development Dilemma in the West African Sahel*. Montclair, NJ: Allanheld, Osmun.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Fraser, Nancy. 2000. “Rethinking Recognition.” *New Left Review* 3 (3): 107–120.

[Google Scholar](#) [WorldCat](#)

Fraser, Nancy. 2007. “Re-framing Justice in a Globalizing World.” In *(Mis)recognition, Social Inequality and Social Justice: Nancy Fraser and Pierre Bourdieu*, edited by Terry Lovell, 17–35. Abingdon, UK: Routledge.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Fraser, Nancy. 2011. “Marketization, Social Protection, Emancipation: Toward a Neo-Polanyian Conception of Capitalist Crisis.” In *Business as Usual: The Roots of the Global Financial Meltdown*, edited by Craig J Calhoun and Georgi M. Derluigan, 137–158. New York: New York University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Fraser, Nancy. 2021. “Climates of Capital: For a Trans-environmental Eco-socialism.” *New Left Review* 127: 94–127.

[Google Scholar](#) [WorldCat](#)

Friedman, Thomas L. 2016. “Out of Africa.” *New York Times*, April 13. www.nytimes.com/2016/04/13/opinion/out-of-africa.html?mcubz=0.

Galtung, Johan. 1969. “Violence, Peace, and Peace Research.” *Journal of Peace Research* 6: 167–191.

[Google Scholar](#) [WorldCat](#)

Giannini, Alessandra, P. Krishna Krishnamurthy, Rémi Cousin, Naouar Labidi, and Richard J. Choularton. 2017. “Climate Risk and Food Security in Mali: A Historical Perspective on Adaptation.” *Earth’s Future* 5 (2): 144–157.

[Google Scholar](#) [WorldCat](#)

Government of Bangladesh. 2008. “Cyclone Sidr in Bangladesh: Damage, Loss, and Needs Assessment for Disaster Recovery and Reconstruction.” Report prepared by the Government of Bangladesh Assisted by the International Development Community with Financial Support from the European Commission, April.

Gramsci, Antonio. 1971. *Selections from the Prison Notebooks of Antonio Gramsci*. New York: International Publishers.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Guyer, Jane, and Paulene Peters. 1987. “Conceptualizing the Household: Issues of Theory and Policy in Africa.” *Development and Change* 18 (2): 197–327.

[Google Scholar](#) [WorldCat](#)

Hart, Gillian. 1992. “Household Production Reconsidered: Gender, Labor Conflict, and Technological Change in Malaysia’s Muda region.” *World Development* 20 (6): 809–823.

[Google Scholar](#) [WorldCat](#)

Hart, H. L. A., and A. M. Honoré. 1959. *Causation in the Law*. 2nd ed. Oxford: Oxford University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Hayes, Ashley. 2009. “Army Corps of Engineers Liable for Katrina flooding.” CNN, November 19.

<http://www.cnn.com/2009/US/11/18/louisiana.katrina.lawsuit/index.html>.

IPCC (SREX). 2012. *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation: A Special Report of Working Groups I and II of the Intergovernmental Panel on Climate Change*. Edited by C. B. Field, V. Barros, T. F. Stocker, D. Qin, D. J. Dokken, K. L. Ebi, et al. Cambridge, UK, and New York: Cambridge University Press.

https://www.ipcc.ch/site/assets/uploads/2018/03/SREX_Full_Report-1.pdf.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

IPCC. 2014. *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Edited by C. B. Field, V. R. Barros, D. J. Dokken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, et al. Cambridge, UK, and New York: Cambridge University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Jisheng, Yang. 2012. *Tombstone: The Great Chinese Famine 1959–1962*. New York: Farrar, Straus and Giroux.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Lahsen, Myanna, and Jesse Ribot. 2021. "Politics of Attributing Extreme Events and Disasters to Climate Change." *WIREs Climate Change*. 13:e750. [wires.wiley.com/climatechange1of11https://doi.org/10.1002/wcc.750](https://doi.org/10.1002/wcc.750).

[Google Scholar](#) [WorldCat](#)

Lappé, Francis Moore. 2013. "Beyond the Scarcity Scare: Reframing the Discourse of Hunger with an Eco-mind." *Journal of Peasant Studies* 40 (1): 219–238.

[Google Scholar](#) [WorldCat](#)

Leichenko, Robin M., and Karen L. O'Brien. 2008. *Environmental Change and Globalization: Double Exposures*. New York: Oxford University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Luhmann, Niklas. 2002. *Risk: A Sociological Theory*. New Brunswick, NJ: Adeline Transaction.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Lukács, György. 1923. *History and Class Consciousness*. London: Pattern Books.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Majid, Nisar, and Stephen McDowell. 2012. "Hidden Dimensions of the Somalia Famine." *Global Food Security*. 1: 36–42

<http://dx.doi.org/10.1016/j.gfs.2012.07.003>.

[Google Scholar](#) [WorldCat](#)

MFDMB (Ministry of Food and Disaster Management of Bangladesh). 2008. *Super Cyclone Sidr 2007: Impacts and Strategies for Interventions*. Bangladesh Secretariat, Dhaka. Available at: https://www.preventionweb.net/files/9470_cyclonebangladesh.pdf.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Moore, M. 1998. "Death without Taxes: Democracy, State Capacity, and Aid Dependence in the Fourth World." In *Towards a Democratic Developmental State*, edited by Gordon White and Mark Robinson. Oxford: Oxford University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Nussbaum, Martha C. 2001. "Adaptive Preferences and Women's Options." *Economics and Philosophy* 17: 67–88.

[Google Scholar](#) [WorldCat](#)

O'Keefe, Phil, Ken Westgate, and Ben Wisner. 1976. "Taking the Naturalness out of Natural Disasters." *Nature* 260: 566–567.

[Google Scholar](#) [WorldCat](#)

Osmani, S. R. 2005. "Poverty and Human Rights: Building on the Capability Approach." *Journal of Human Development* 6 (2): 205–219.

[Google Scholar](#) [WorldCat](#)

Pelling, M. 2003. *The Vulnerability of Cities: Natural Disasters and Social Resilience*. London: Earthscan.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Polanyi, Karl. (1944) 2001. *The Great Transformation*. 2nd ed. Boston: Beacon Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Raynaud, Claude. 1998. "Diversité et Dynamique des Relations Sociétés-Nature au Sahel." *Natures Sciences Sociétés* 6 (2): 59–62.

[Google Scholar](#) [WorldCat](#)

Raynaut, Claude. 2001. "Societies and Nature in the Sahel: Ecological Diversity and Social Dynamics." *Global Environmental Change* 11: 9–18.

[Google Scholar](#) [WorldCat](#)

Ribot, Jesse. 1995. "The Causal Structure of Vulnerability: Its Application to Climate Impact Analysis." *GeoJournal* 35 (2): 119–122.

[Google Scholar](#) [WorldCat](#)

Ribot, Jesse. 1998. "Theorizing Access: Forest Profits along Senegal's Charcoal Commodity Chain." *Development and Change* 29 (2): 307–341.

[Google Scholar](#) [WorldCat](#)

Ribot, Jesse. 2014. "Cause and Response: Climate Vulnerability in the Anthropocene." *Journal of Peasant Studies* 4 (5): 667–705.

[Google Scholar](#) [WorldCat](#)

Ribot, Jesse. 2022. "Framing Causality and Responsibility: Toward a Sociodicy of Climate-Related Crises." *Journal of Peasant Studies* 49 (4): 683–712.

[Google Scholar](#) [WorldCat](#)

Ribot, Jesse, Papa Faye, and Matthew Turner. 2020. "Climate of Anxiety in the Sahel: Emigration in Xenophobic Times." *Public Culture* 32 (1): 45–75.

[Google Scholar](#) [WorldCat](#)

Ribot, Jesse, and Nancy Lee Peluso. 2003. "A Theory of Access: Putting Property and Tenure in Place." *Rural Sociology* 68 (2): 153–181.

[Google Scholar](#) [WorldCat](#)

Rigaud, Kanta Kumari, Alex de Sherbinin, Bryan Jones, Jonas Bergmann, Viviane Clement, Kayly Ober, et al. 2018. *Groundswell: Preparing for Internal Climate Migration*. Report of the World Bank, Paris.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Rioux, Janie. 2011. *Analyse Globale de la Vulnérabilité, de la Sécurité Alimentaire et de la Nutrition. République du Sénégal 2010*. Rome: Food and Agricultural Organisation of the United Nations.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Robin, Nelly, Richard Lalou, and Mamadou Ndiaye. 2000. *Facteurs d'attraction et de répulsion à l'origine des flux migratoires internationaux*. Rapport National Sénégal. Dakar: IRD et Eurostat.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Rose, Nicolas. 1996. "The Death of the Social? Re-figuring the Territory of Government." *Economy and Society* 25 (3): 327–356.

[Google Scholar](#) [WorldCat](#)

Sane, Hamide, and Moussa Diallo. 2019. "Tambacounda 2019: Situation Economique et Sociale Regionale." République du Sénégal, Ministère de l'Économie, du Plan et de la Coopération, Agence Nationale de la Statistique et de la Démographie, September.

Schroeder, Richard. 1999. "Community Forestry and Conditionality in the Gambia." *Africa* 69 (1): 1–22.

[Google Scholar](#) [WorldCat](#)

Sen, Amartya. 1980. "Famines." *World Development* 8 (9): 613–621.

[Google Scholar](#) [WorldCat](#)

Sen, Amartya. 1981. *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford: Oxford University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Sen, Amartya. 1984. "Rights and Capabilities." In *Resources, Values and Development*, edited by Amartya Sen, 307–324. Oxford: Basil Blackwell.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Sen, Amartya. 1999. *Development as Freedom*. New York: A. A. Knopf.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Scott, James C. 1976. *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven, CT: Yale University Press.

Smucker, Thomas A., and Ben Wisner. 2008. "Changing Household Responses to Drought in Tharaka, Kenya: Vulnerability Persistence and Challenge." In *Changing Household Responses to Drought in Tharaka, Kenya: Vulnerability, Persistence and Challenge*, edited by Ben Wisner. Journal Compilation of the Overseas Development Institute. Oxford: Blackwell.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Somers, Margaret R. 2008. *Genealogies of Citizenship, Markets, Statelessness, and the Right to Have Rights*. Cambridge, UK: Cambridge University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Swift, Jeremy. 1989. "Why Are Rural People Vulnerable to Famine?" *IDS Bulletin* 20 (2): 8–15.

<https://www.tandfonline.com/eprint/3ZVQ24AZRMFPSSER3IK4/full?target=10.1080/03066150.2021.1996355>.

[Google Scholar](#) [WorldCat](#)

Taylor, Charles. 1994. "The Politics of Recognition." pp 25–74 in *Multiculturalism: Examining the Politics of Recognition*, edited by Amy Guttmann. Princeton, NJ: Princeton University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Turner, Matthew D. 2000. "Drought, Domestic Budgeting and Wealth Distribution in Sahelian Households." *Development and Change* 3 (4): 1009–1035.

[Google Scholar](#) [WorldCat](#)

Turner, Billy L., II, Roger E. Kasperson, Pamela A. Matson, James J. McCarthy, Robert W. Corell, Lindsey Christensen, et al. 2003. "A Framework for Vulnerability Analysis in Sustainability Science." *Proceedings of the National Academy of Sciences of the United States of America* 100 (14): 8074–8079.

[Google Scholar](#) [WorldCat](#)

Turner, Billy L., II, Pamela A. Matson, James J. McCarthy, Robert W. Corell, Lindsey Christensen, Noelle Eckley, et al. 2003.

"Illustrating the Coupled Human-Environment System for Vanalysis: Three Case Studies." *Proceedings of the National Academy of Sciences of the United States of America* 100 (14): 8080–8085.

[Google Scholar](#) [WorldCat](#)

Turner, Matthew, Jesse Ribot, and Oumarou Moumouni. 2022. "Suffering for Dignity and Hope: Young Nigeriens Choose Perilous Trans-Saharan Migration." *Journal of Peasant Studies*. Accepted August 2022. Published online 18 October 2022.

<https://www.tandfonline.com/eprint/DUCZWNUYKNUNNAWETZZ/full?target=10.1080/03066150.2022.2121647>.

[WorldCat](#)

Turner, Matthew, Soumaila Abdoulaye Sambo, Jesse Ribot, and Papa Faye. 2021. In Review [October]. "Climate Migrants? Identifying the Social Causes of Sahelian Trans-Saharan Migration." *Geoforum*.

Turner, Matthew D., and Molly S. Teague. 2019. "Trans-Saharan Labor Emigration from Niger: Local Governance as Mediator of Its Underlying Causes and Consequences." ILCD Working Document No 16. Visby, Sweden: Swedish International Centre for Local Democracy.

United Nations Development Programme. 2015. *Sendai Framework for Disaster Risk Reduction 2015-2030*. Report of Third United Nations World Conference on Disaster Risk Reduction, held from March 14 to 18, 2015 in Sendai, Miyagi, Japan.

VAM (Service de l'Analyse de la Sécurité Alimentaire). 2014. *Analyse de la vulnérabilité globale à la sécurité alimentaire et de la nutrition*. Sénégal. Rome: Programme Alimentaire Mondiale.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Vaughan, Megan. 1987. *The Story of an African Famine: Gender and Famine in Twentieth Century Malawi*. Cambridge, UK: Cambridge University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Watts, Michael J. 1983a. "On the Poverty of Theory: Natural Hazards Research in Context." In *Interpretations of Calamity*, edited by Kenneth Hewitt, 231–261. London: Allen Unwin.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Watts, Michael J. 1983b. *Silent Violence: Food Famine and Peasantry in Northern Nigeria*. Berkeley: University of California Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Watts, Michael. 1991. "Entitlements or Empowerment? Famine and Starvation in Africa." *Review of African Political Economy* 51:

Watts, Michael J., and Hans Bohle. 1993. “The Space of Vulnerability: The Causal Structure of Hunger and Famine.” *Progress in Human Geography* 17 (1): 43–68.

[Google Scholar](#) [WorldCat](#)

Weheliye, Alexander G. 2014. *Habeas Viscus: Racializing Assemblages, Biopolitics, and Black Feminist Theories of the Human*. Durham, NC: Duke University Press.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

White House. 2006. “The Federal Response to Hurricane Katrina.” February. Accessed December 5, 2008. <https://georgewbush-whitehouse.archives.gov/news/releases/2006/02/20060223.html>.

[WorldCat](#)

Wilkinson, Iain. 2010. *Vulnerability in Everyday Life*. London: Routledge.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Wisner, Ben, Piers M. Blaikie, and Terrance Cannon. 2004. *At Risk: Natural Hazards, People’s Vulnerability and Disasters*. 2nd ed. London: Routledge.

[Google Scholar](#) [Google Preview](#) [WorldCat](#) [COPAC](#)

Wolford, Wendy. 2007. “Land Reform in the Time of Neoliberalism: A Many-Splendored Thing.” *Antipode* 39 (3): 550–570.

[Google Scholar](#) [WorldCat](#)

Yohe, G. and R. S. J. Tol. 2002. “Indicators for Social and Economic Coping Capacity—Moving Toward a Working Definition of Adaptive Capacity.” *Global Environmental Change* 12 (1): 25–40.

[Google Scholar](#) [WorldCat](#)

Notes

- 1 “Policies and practices for disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment” (United Nations Development Programme 2015, 23).
- 2 Sen (1984) notes, “Since it is implausible—indeed I believe incredible—to claim [by privileging ‘just’ acquisition] that consequences in the form of life or death, starvation or nourishment, indeed pleasure or pain, are intrinsically matters of moral indifference, or have only very weak intrinsic moral relevance, it is not easy to see why history-based rules of procedure should be so invulnerable to the facts of their consequences” (313).
- 3 Entitlement failure happens “either because of a fall in her endowment (e.g. alienation of land, or loss of labour power due to ill health), or because of an unfavorable shift in her exchange entitlement (e.g. loss of employment, fall in wages, rise in food prices, drop in the price of goods or services she sells, decline in self-employed production)” (Drèze and Sen 1989, 23).
- 4 As Fine (1997), points out, “A weapon, for example, is an endowment that has an exchange value with an equivalent in food; but it can also gain a purchase on access to food through (collective) violence as well as redefine property rights and ownership, but only depending upon the shifting social conditions in which it is wielded” (629).
- 5 Viewing hazards as “triggers” rather than causes makes it possible for analysts to include the causes of the fragilities that enable hazards to result in damages. “Climate, ‘over-population’ and war, while potentially significant as proximate or trigger factors, have been substantially discredited as primary factors” (Watts 1991, 15). “The challenge today is to integrate agency and structure in examinations of the production of vulnerability, in specific places, whilst also acknowledging the importance of physical systems in generating hazard that can trigger disaster” (Pelling 2003, 47). Wisner, Blaikie, and Cannon (2004) point to how “most government agencies charged with such responsibilities as ‘environment,’ ‘health and welfare’ and ‘public safety’ generally still deal with disasters as though they are *equivalent* to the hazards that trigger them” (61).
- 6 Although overall rainfall has increased, climate change is changing rainfall patterns and variability. Short periods of intense flooding with long periods of dry season can be devastating for farmers. The magnitude of these changes in variability are, however, not clear.
- 7 It is not a new phenomenon that migrants are largely men (Robin, Lalou, and Ndiaye 2000, 18).
- 8 “Barcelona” refers to Europe in general. It was an earlier destination for migrants, who are now, more often, heading to

Italy and other destinations.

- 9 For the case of emigration from Niger toward Libya, see Turner, Ribot, and Moumouni (mimeo 2022); and Turner et al. (mimeo 2022).
- 10 Capability is a political goal, the actual functions (desired beings and doings) are the individual choice. The key for Sen (1984) is that people have the ability to make this choice. Nussbaum (2001) asks a slightly different question, whether desires and preferences can really be “a guide to what is really just and good” (70). When people accept what others find to be unacceptable conditions, can we simply allow them this privilege—and refrain for accounting for taste?