

Article

# Causes for Adaptation: Access to Forests, Markets and Representation in Eastern Senegal

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**Abstract:** Adaptation is a means of reducing vulnerability. So, understanding causes of vulnerability should help to achieve adaptation. Why, then, are people vulnerable? Why do expected dry spells turn into hunger? Why do mere droughts become disasters? This article shows some of the multi-scale processes that make the lives of people in the forests of Eastern Senegal precarious; it outlines processes that reduce forest villagers' access to resources, lucrative markets and political representation. These are the processes that place villagers at risk when exposed to stressors—climate or otherwise. In this case, the Forest Service applies double standards—favoring urban merchants while subordinating forest villagers—through the making, interpretation, implementation and circumvention of laws and regulations. The wealth of the poor is continuously expropriated by a well-adapted extractive apparatus, enriching urban merchants while leaving villagers incapacitated. These people may lack adaptive capacity or capability or assets or social protections, but those lacks have causes. “Adaptation” without identifying and addressing these root causes is palliative at best. Security requires emancipatory transformations.

**Keywords:** Senegal; forests; adaptation; vulnerability; transformation

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As a point of departure, let us say that violence is present when human beings are being influenced so that their actual somatic and mental realizations are below their potential realizations. . . . *Violence is here defined as the cause of the difference between the potential and the actual, between what could have been and what is.*

....

We shall refer to the type of violence where there is an actor that commits the violence as personal or direct, and to violence where there is no such actor as structural or indirect.

Johan Galtung ([1], pp. 168–170)  
Violence, peace, and peace research  
(emphasis in original)

La précarité affecte profondément celui ou celle qui la subit; en rendant tout l'avenir incertain, elle interdit toute anticipation rationnelle et, en particulier, ce minimum de croyance et d'espérance en l'avenir qu'il faut avoir pour se révolter, surtout collectivement, contre le présent, même le plus intolérable.

Pierre Bourdieu [2]  
La Précarité est aujourd'hui partout

## 1. Introduction

Eriksen et al. ([3], p. 524) define adaptation as “... a contested social-political process that mediates how individuals and collectives deal with multiple types of simultaneously occurring environmental and social changes”. They argue that it “... must be seen as part of the dynamics of societies rather than simply being a technical adjustment to biophysical change...”. Adaptation then must reflect and respond to the multiple reasons that people are or are not able to adjust. Yohe and Tol [4], and many since, have called this ability “adaptive capacity”. Its presence is security. Its absence is vulnerability—a predisposition to damage [5]. Vulnerability is a condition that exists well before a stressor—from climate, policy, or social conditions—arrives. To reduce vulnerability, that is to “adapt”, requires understanding and redressing the causes of this precarious condition (see [2,6]).

The longitudinal case presented in this article, shows how income-generating opportunities in forestry are systematically taken away from forest villagers in the Tambacounda Region of Senegal. Every time Tambacounda’s peasants stand to profit, the opportunity is captured by an urban merchant class with the support of government. Peasants are beaten back into subsistence from any pathway out of precarity. The case of forestry in Tambacounda painstakingly charts the generation and maintenance of forest-villager marginality that spells vulnerability. It shows how the wealth of the poor is taken away—generating the famous need for adaptation. It shows that the causes of precarity are not about the “capacities” of individuals, but rather about the ways they are deprived of assets—through denied access to resources, markets and government.

The term “capacity”, so central in adaptation thinking, is problematic. It focuses on the internal characteristics of the individual or community—as if they just need some support or training to be stronger and more resilient. An adaptation framing asks *who* lacks this capacity and then focuses on how to help them to adapt—as if this lack were a natural condition, an immaturity, or a need of development that requires no explanation [7,8]. However, this lack of ability (of capacities and protections) is not merely about the qualities of the at-risk people; it is a product of the social system in which they are embedded. Adaptation analysts, to identify ways to reduce that risk, must ask *why*, within current societies, people come to be at risk—cause, which is social, matters. This idea of looking at the origins of risk or vulnerability to understand how to “adapt” is not new (see [8–12]). As Forsyth ([12], p. 99) notes, a serious adaptation analysis needs to address “how, and for whom, hazardous events linked to climate change actually become risks for specific people and places” in order to identify appropriate adjustments. It is still curious that causality remains marginal to most adaptation analyses.

Like Nightingale [13], we argue that adaptation misses the micro-politics of risk production—the differentiated power relations that favor some people while marginalizing others. Like Taylor [14] we show that it also misses the broader structural causes of risk. Taylor ([14], pp. 74–79), among others [15,16] and ([17], pp. 87–88), points out that adaptation discourses shift analysis toward “systems” thinking, away from political economy and history. To have a full picture of the causes of risk production, the causes of vulnerability, the reasons that adaptive capacity might be lacking or cannot be used, requires a multi-scale analysis of causes of the lack of ability or the inability to use the abilities people have. It entails starting with instances of damaging crisis where people could not protect themselves or were not protected, followed by a tracing out of the cause of damage across space and time, as outlined by Watts and Bohle [18]. These causal chains of Blaikie [19] lead us to root causes—the direct and indirect causes of social marginality that place and maintain certain classes in a precarious position.

The social-capital and polycentric-circles approaches to adaptation, *a la* Putnam ([20], p. 85) and Ostrom [21], are also inadequate. People are not merely in need of social knowledge and ties. They are already embedded in hierarchies of unequal power that excludes them from resources and opportunities. It is not a lack of relations, but subordination within relations. Those who dominate—and the structural conditions in which they do so—can shape institutions and distributions with each change in nature or policy (also see [18,22,23]). Thus, while global warming is changing the

world, the distributional effects and risks associated with those changes follow the contours of social power and inequality. Policies called “adaptation” follow these same contours—precisely because they do not challenge larger political-economic arrangements and associated inequalities; by failing to interrogate unequal power, they risk making changes that conform to and reinforce existing hierarchies of privilege and marginality.

The production of vulnerability (e.g., the reduction or immobilizing of adaptive capacity) will never be understood via mere socioeconomic indicators of who is at risk; it cannot be presumed to start with capacity or social ties, but must be explained by addressing the origins of capacity and conditions of its uses and the nature of the social relations it is located in. The terms of analysis must include the whole range of internal and external, direct and indirect, forces—including those shaping capacities and relations—that shape risk and adjustment [23]. In analyzing the ability to adapt we must include all factors—the social and political structures that shape contingent and unequal power relations—that enable and disable “adaptation”. To do so, we use an approach that starts by analyzing assets and social protections (e.g., Sen’s [24] entitlements), and we include an analysis of representation, by which we mean the ability of people to shape the political economy that shapes their entitlements [18,24–28]. Transformative adaptation, then, requires understanding of the many recursive contingent processes that generate precarity so that adaptation interventions can target those processes [15,23,29]. (Note: Damages are not merely caused by climate hazards, and thus adaptation cannot merely be a response to climate stress [30]. Adaptation must address the many factors that shape the damages it aims to avoid, precisely because damages are a function of multiple factors beyond climate [30–32], also see ([33], p. 804.)

The problem we explore in Tambacounda is a systematic denial of access to forests, access to urban markets, and access to influence over those who govern—a set of denials that enables a merchant class to exploit and profit from forests and forest villagers. The primary problem is the use and manipulation and unequal application of law and regulation to hem in forest villagers’ activity space and diminish their life options and opportunities—their “potential realizations” (*à la* Galtung [1], p 168). It is in this context that some actors are deprived of the means to protect themselves in hard times. It is here that some actors benefit while others do not from the opportunities of adaptive (or any other) development policy. It is here that hopeless precarity is bred.

Forest villagers do not need mere internal “capacity”. They need the social-political-legal powers that enable (1) access to material resources; (2) access to markets and (3) access to political processes through which they can challenge the foresters and merchants who exploit them. They need assets, social protections and representation (e.g., responsive and accountable government of [34]—they need rights (enforceable claims of MacPherson [35]), the right to have rights (citizenship *à la* Somers [36]), and the right to make rights (representation *à la* Ribot ([23], p. 697)). Capacity, as we often observe, follows power ([37], p. 65)—with material and political means people find ways. To gain those powers they will need adaptive abilities, or following Sen [25] adaptive capabilities—the assets and social protections, but first and foremost the emancipation by which they can shape their own fates [26–28,38].

The case we present of charcoal production and trade in Senegal shows how the ability to do and be is differentially shaped for two social groups—urban merchants and forest villagers [39]. Differentiation is achieved creating categories of “merchants” for urban traders and “local producers” forest villagers. [39]. These categories are then subject to separate and skewed sets of rights and regulations—as well as different practices by regulatory bodies. The article shows how, despite discourses of democracy and market liberalism, double-standard rules are developed that give merchants access to resources, cheap migrant labor and markets while relegating forest villagers to the participatory corvée of forest management, blocking their access to cheap migrant labor, limiting their access to markets and forcing them to sell to urban merchants at low forest-edge prices. The tools of this differentiation include identity, belonging, law, regulation, and selective application of rules, discourses, accusation, coercion, and theft. These shape differential access to the resource (forests), the lucrative urban market (Dakar), and representation (democratic processes of local government).

They shape a merchant class that is included, represented and protected, and a rural tier with neither rights nor representation—the precariat.

This article tells the same grinding story over and over—local income improvements taken back again and again, each time through new and creative means. The promised benefits of policies and projects that could have enabled asset building and greater security were repeatedly expropriated. The case study follows and explains how regulatory manipulations and Forest Service practice shaped distribution of profits within the Tambacounda-Dakar charcoal trade across policy eras from the 1990s to 2014. The conclusion summarizes the political-economic production of deepened rural poverty and continued urban accumulation. It describes the political-economic regime that enables business to continue, as usual, with precarity as a constant. It calls for transformative rather than adaptive treatment of climate-related risk [29].

## 2. Materials and Methods

The case study we present is based on periodic ethnographic field research and surveys in the Tambacounda Region (a province) of Senegal by Ribot from 1986 to 2008 and by Faye from 2004 to 2014. Field research periods have varied from one month to one-and-a-half years in the forests villages. We have systematically interviewed and conducted surveys on woodcutters, non-woodcutter forest villagers, local elected authorities, local environment and development agents. We have also carried out extensive interviews with forestry and other development agents and agencies in the capital city of Dakar. The surveys quantified incomes of actors at each level of the charcoal market and then interrogated how each actor gained access to that income. This involved detailed studies of the processes of access to material resources (forests and equipment), access to government (as in licenses, quotas and permits, or access to representation), and access to markets (via social relations with actors who had access to government resources). The surveys were complemented in all cases by participant observation and open-ended interviews. We systematically triangulated our information by asking how one group understood its own economic conditions while asking other groups to recount the same for subordinates or superiors along the studied commodity chain. More of our quantitative and ethnographic data are presented elsewhere [15,23,39–43].

## 3. Tambacounda, Agriculture and Charcoal

Charcoal production in Senegal's Tambacounda Region provides supplementary income for peasant farmers—an income that could raise them above the subsistence threshold. Tambacounda is among the most remote and disadvantaged regions in Senegal [44]. Only 53 percent of its population has access to a road at a distance of five kilometers [45], and despite a rich network of rivers, 92 percent of rural households depend on rain-fed agriculture. Tambacounda rainfall was 681 mm at the end of the 1990s, down overall in Senegal by eighteen percent since the 1930s ([46], see also Honoré and Konaté [47], p. 504). Tambacounda agriculture no longer feeds the population. However, this reduced role of agricultural stems from social and institutional factors rather than environmental or climate constraints [48,49]. Lower incomes are linked to a shift toward cotton production that has introduced new forms of debt and exposure to global price swings [48]. Further, the government and donors have ignored Tambacounda, focusing instead on irrigated agriculture in northern and southern regions where 71 percent of agricultural public investments are concentrated [48]. Meanwhile, less-remunerative rain-fed areas, growing groundnuts, cereals and cotton, on which Tambacounda's peasants depend, receive little State or international support. Environmental stressors include droughts in the 1970s and 1980s, and a decline and increased variability in rainfall. However, few farmers speak of rain or climate when explaining their woes [33]. Cattle herds and insects have also been damaging cotton cultivation, in some areas there is soil degradation due to lack of fertilizer use and short fallow, and some forest degradation is reported due to agricultural clearing ([50], p. 12).

Rural people in Tambacounda region lack the basic services such as medical and transportation infrastructures compounded by the crisis of agriculture. Annual net income in agriculture provides

peasants roughly US\$90 per year ([48], see also MA [50], p. 17). Farmers cannot survive on this income even when supplemented with subsistence farming. During the last two decades, charcoal production in southern Tambacounda's forests has become one of the most important alternative income sources [51,52]. However, like in cotton, a lucrative industry that leaves little income with the farmers, the revenues from charcoal lifted very few peasants out of poverty—even with the help of well-intentioned international forest management projects. From our observations of and discussions with farmers in each sector, it appears that all opportunities in this region are diminished in a similar manner—opportunities exist, but government agents in collaboration with commercial outside interests, ratchet the local portion of income down to below subsistence; profits flow primarily to urban commercial actors. This article delves into the case of charcoal as an example of how this extraction operates. Extraction is different in each sector. In cotton the mechanism of extraction may be debt [48], in charcoal there are multiple mechanisms at work that diminish peasant access to forests, markets and representation, and thus to income and wellbeing. The next sections show how income from charcoal in Tambacounda has been captured by foresters and urban merchants over the past three decades.

#### 4. Pre-Decentralization Forestry Policy: Centralized Access to Markets and Decision Making through the Mid-1990s

Charcoal—used as cooking fuel for urban households—has been the main income-generating forest product in Senegal since the 1940s. In the 1940s, forest use, including charcoal production, was organized around a system of permits allocated by the National Forest Service—merchants were given charcoal quotas that they had to meet to ensure adequate urban supply. Licenses for forest merchants were introduced in 1972 ([53], p. 127). Starting in 1980, the Ministry of Environment reoriented the quota from a minimum supply requirement merchants were required to fulfill to a production ceiling said to impose a limit on charcoal production for environmental protection (an annual maximum national charcoal quota) ([54], p. 123). The quota was allocated among licensed charcoal merchants who hired low-paid migrant laborers from Guinea; forest villagers rarely worked in forest commerce [54]. The charcoal makers—lumberjacks—in Senegal are men. A few women have been integrated through projects, but the absence of women in this analysis is due to their rarity in the sector. This absence is part of a gender division of labor in Tambacounda that is not the focus of our analysis (see [55]).

In the 1980s and 1990s, the nationally set quota for charcoal was divided among some 120 to 170 urban forestry entities—economic interest groups (for-profit cooperatives called *Groupement d'Intérêt Economique*, GIE), cooperatives and private enterprises. For most of these entities only one member held a forestry license. That merchant controlled the entity's charcoal quotas. This system enabled foresters to allocate access to the sector, giving the licensed merchants control over the resource and markets—for quotas went to merchants with licenses, and production and transport permits were available only to quota holders.

Entry into this privileged merchant class was and remains highly selective—the Forest Service and Ministry admitted those with strong political connections [54,56]. In 2005, for example, the eighteen new cooperatives admitted into the market ([57], p. 12) were relatives and friends of powerful urban merchants and the Environment Minister. Peasant-organized entities that applied for licenses were refused [57,58]. The Forest Service absurdly justified their refusal stating that “they [villagers] need to be trained” and explaining that “if we let them produce, they will learn the bad [production] techniques of the *surga* [migrant laborers from Guinea]” (Interviews, two Regional Forest Service officials, IREF, and three Forest Service Technical Agents, ATEF, in Tamba December 2005).

Quota allocations to licensed entities were announced annually at a Regional (the Region being a political-administrative district like a province) meeting (see [59–62]). Each quota was ostensibly based on previous year's production with increases for those who finished early or engaged in reforestation. A study in 1987 showed that migrants working for the merchants had an average

net income of \$770—with little variation among them. This was a subsistence wage (farming subsistence incomes are lower because they consume their own produce). Most merchants active in the charcoal market made from \$1000 to \$25,000 annually, with fifteen to twenty merchants controlling over half of the commerce. The wealthiest urban merchant in that era made on the order of \$500,000 annually [22,52,54].

### 5. Participatory and Decentralized Forestry Codes in the 1990s: Double Talk, Double Standards

Licenses, quotas and permits privileged urban merchants resource and market access. Meanwhile the 1993 “participatory” forestry code [59] called for the participation of forest villagers in the odium of forest management. Foresters used villager participation to implement burdensome management prescriptions of demarcating, cutting firebreaks and policing. Their remuneration for this unpaid management labor—participatory *corvée*—was the privilege of producing charcoal and selling it to licensed merchants at the subsistence forest-edge prices that the migrants were receiving in unmanaged areas. If villagers did not choose to “participate” the foresters allowed merchants to bring in their migrant laborers to cut village forests without any management obligations. Villagers opted not to “participate” in charcoal production under this scheme. The 1993 code did nothing for villagers or forest management [56].

In 1996, Senegal promulgated a progressive decentralization law that promised substantive local empowerment through democratic representation in forestry decisions by their elected local governments. The new law aimed for local development and democratization, bringing decision making geographically closer to direct beneficiaries ([63], see preamble). It brought the scale of forestry decision making to the Rural Community, the most-local scale of local government—a jurisdiction regrouping many small and medium villages (up to 20,000 inhabitants) that is governed by elected Rural Councils. It also gave Rural Councils legal jurisdiction over “Community Forests,” which include those forests in the Rural Community not nationally gazetted as parks and reserves (most of Senegal’s forests are not gazetted) ([59], article R9). The elected Rural Council was given rights over the “management of forests on the basis of a management plan approved by the competent state authority” ([63], article No. 30). The 1996 decentralization law gave the Rural Council jurisdiction over “the organization of exploitation of all gathered plant products and the cutting of wood” ([63], article No. 195). To bring forestry law in line with the 1996 decentralization, the 1998 forestry code established the right of the Rural Councils to determine who can produce in rural “community forests” ([63], articles L8, R21). Under the 1996 and 1998 laws, still in force today, Rural Communities hold the right to manage their forests.

The 1998 forestry code provided for a period of transition from central management to the use of forest management plans for each Rural Community, plans would be in place and the quota system would be entirely eliminated in 2001 ([63], article R66). After 2001, forest management plans would be required for all production areas and the quantity of permissible production would be based on the biological potential of each Rural Community’s forests. The Rural Council rather than the National Forest Service would choose the enterprises that could work within its forests. In short, within the technical constraints of forest management, Rural Councils were granted the radically progressive new right to decide whether or not to cut their forests and who could have rights to cut and commercialize them.

However, despite these dramatic gains in legal provisions for local control over forests, foresters manipulated implementation to ensure the status quo—urban merchant control and villager exclusion. After 1998, Rural Council Presidents (PCRs) held legal rights over forest access and use ([63], article L4); the Forest Service was required to obtain the signature of the PCRs before any forest production could take place. In this period, PCRs and the forest villagers were against production in their forests—primarily because they saw no benefit. Thus, they said no and refused to sign. Foresters did not, however, accept “no”. They argued that PCRs were too ignorant to make forest management and use decisions and that national priorities trump local ones. The Regional Forest Service deputy

director argued: “The resource is for the entire country. To not use it, there must be technical reasons. The populations are there to manage. There is a national imperative. There are priorities of the state. This cannot work if the populations pose problems for development”. (Interview, Deputy Director of the Regional Forest Service, Tambacounda, 3 December 2005.)

PCRs, nevertheless, refused to authorize charcoal production. Then, PCRs who belonged to the ruling party were threatened by the higher leaders with exclusion from party lists. Foresters also told PCRs not to block the commerce of other national citizens’ (the merchants). Some of them were also bribed (relatively small sums) by merchants—important people whom they did not want to or could not turn down. PCRs were ultimately coerced into signing [58,61,64–66]. Eventually all PCRs signed against their will, reflecting their lack of bargaining power—despite their legal right. Refusing more powerful actors would deprive them of access to politics and other future opportunities. (The story of this coercion is told in two films: “Weex Dunx and the Quota” [66] and “Double Bladed Axe” [67].)

The 1996 and 1998 laws gave forest use and management decisions to local representatives; the Forest Service and merchants took them back via political pressure and payoffs. If implemented as specified in law, the new system would have empowered Rural Councils to manage their forests for the benefit of the villagers. Were they able to say “no”, the right given to them by law, they would have had a bargaining position to leverage benefits. The laws, despite their aim to benefit villagers, provided forest villagers with little income from the charcoal production that continued around them. Their only benefit was that seventy percent of revenues from fines on illegal forest use went to the Rural Community in whose territory the illegal activities took place—ostensibly an incentive for Rural Communities to help enforce the new laws. Few Rural Councils ever saw those revenues. The Forest Service and central government kept them.

Despite legal decentralized control over forest management, PCRs made few decision and forest villagers could leverage few benefits from forests. To support the proper implementation of decentralization laws, the World Bank, which would later introduce “adaptation” goals, and USAID launched forest management projects with stated aims to break the merchant oligopsony and increase representation while better managing the resources.

## **6. Development Projects from 1998: Continued Differentiated Access to Representation and Markets**

The largest forestry project in Senegal is the Sustainable and Participatory Energy Management Project (Programme de gestion durable des énergies traditionnelles et de substitution), known by its French acronym, PROGEDE. PROGEDE is located within Senegal’s Forest Service and is funded by the World Bank. It had a first phase (herein PROGEDE-I) from 1998 to 2008 and, after a three-year pause, a second phase from 2011 to 2016 (herein PROGEDE-II). The other main forestry project, Wula Nafaa, meaning “forest value” in Mandinka, is a US Agency for International Development forestry project founded in 2003. Its aim was to entice people to value the forests through commercialization [68]. We focus here on PROGEDE.

These two environment-development projects supported the forestry decentralization process in Tambacounda. Both fought to transform the command-and-control management stance of the Forest Service by supporting local participation and representation and by working to break the merchant oligopsony to enable villagers to have access to the resource and to markets. The projects were designed with common objectives: to ensure regular and sufficient supply of cities with charcoal; implement local participation and representation as indicated by the 1996 decentralization reform and the new decentralized 1998 forestry law; and promote alternative energy forms for resource sustainability [68,69].

An underlying assumption of the projects was that if rural people engaged in charcoal production and trade, poverty would be alleviated, they would see the role of natural resources in their livelihoods, and they would therefore be more environmentally sensitive [68,69]. Without changing its basic goals, PROGEDE integrated language of adaptation into the objectives of its second phase by clearly

indicating in the project document that “PROGEDE II will demonstrate how adaptation and mitigation can be usefully combined in a way that enhances incomes and diversifies livelihoods of the poor, while also securing benefits for biodiversity, gender equality and carbon sequestration” ([70], p. 43). One initial aim of PROGEDE was to have the rural people replace the private urban merchants; supplying all of Senegal’s charcoal [69]. With or without adaptation language, the project goals, were they implemented, aimed to increase local incomes and local access to resources, markets and to the representative structures by which they might improve their wellbeing and security in the face of a changing climate.

In the subsection below, we delineate PROGEDE into a pre-management and management period, rather than into PROGEDE-I and -II, to better grasp the development of practices and regulations. The pre-management period from 1998 to 2007 covered most of PROGEDE I (which ran through 2008). This was a period for identifying the forests to be managed, conducting inventories of forest resources, convincing forest villagers to engage in project activities, drawing up forest management plans, and organizing villagers into the committees that would later be project platforms for local representation. The management period has run from 2008 to present (starting prior to and covering PROGEDE II) and is the period where the forest service acknowledged that enough forest management plans were established to enable all commercial production to take place in villager-managed forests with approved management plans.

The next subsection assesses PROGEDE’s attempts to increase rural people’s access to the charcoal market and to better represent them in the decision making on charcoal production and trade—changes that could significantly increase local incomes.

### 6.1. Pre-Management Period: 1998 to 2007

#### 6.1.1. From 1998 to 2004: Pre-Management without Management Plans

In the pre-management period, while the Forest Service, with technical and financial support by PROGEDE, was drawing up the first management plans, forest villagers wishing to engage in charcoal production could do so under strict supervision of the Forest Service and PROGEDE staff. These arrangements would continue until the plans were approved by the Forest Service. With approved plans it was anticipated that forest villagers would be allowed to take over forest management. However, while the 1998 forestry code mandated that plans would be in place for all production zones by 2001, but the first plans were not approved by the forest service until 2005. Foresters claimed that plans were not ready, and that villagers were too ignorant of forestry techniques to manage forests. Thus, foresters maintained control over village forestry activities.

In 1998 PROGEDE and the Forest Service launched forest inventories. When the inventories were completed in 2002 they organized the villages in each forest targeted for management into Management and Development Village Committees (hereafter “Village Committees”), which they regrouped into an Inter-Village Committee (IVC). Village Committees were used to mobilize villagers for project activities such as forest policing, firebreaks clearing, and fighting forest fires, and for charcoal production. At this time production quotas were still allocated uniquely to the merchants by the National Forest Service. Thus, forest villagers, via their IVCs, had to engage with merchants to have the right to produce under merchant quotas. PROGEDE facilitated the negotiation of contracts between IVCs and the merchants, and the IVCs involvement in determining the location of production plots and distribution of access to quotas among villagers. PROGEDE used IVCs to represent local people in forestry—despite that this was a role that the 1996 and 1998 decentralization laws gave to the elected Rural Council and the PCR. In this way IVCs displaced the elected Rural Council as the arena of local democracy in forestry. (The PCRs were present, yet had no say, despite the fact that IVC meetings took place in their headquarters, *Maison communautaire*. Also see [71] for an analysis of PCR exclusion.)



The inventories were supposed to be a step towards elimination of the quota so that the Rural Council could know the production potential of its forests and then allocate production rights. However, the right to allocate rights was never transferred to the Rural Councils. In 2008, after intensive lobbying by PROGEDE and Wula Naafa from the end of the inventory in 2002 to 2008, the right to allocate was transferred to forestry project-organized committees and the Rural Council was given the right to “witness” the committee’s decisions. First foresters refused to make the transfer at all despite that inventories were done since 2002, arguing that villagers were not properly organized or sufficiently trained. Up to 2008 the Ministry of Environment and Forest Service continued to allocate quotas—they continued to allocate this lucrative opportunity to merchant while excluding forest villagers—despite democratic decentralization discourses and laws.

In 2002, with inventories in hand and village committees set up, PROGEDE called an annual meeting in the regional capital for the signing of contracts between IVCs (representing forest villagers) and the merchants national union, *Union nationale des coopératives d’exploitants forestiers du Sénégal*, or UNCEFS. During that meeting the IVC presidents had to state how many sacks of charcoal each Village Committees was willing to commit to produce. The merchants also had to commit to buy all of the production of the Village Committees. The formalization of those contracts was called contractualization in French. The resulting contracts were witnessed by the PCRs and approved by the head of the Regional Forest Service office (IREF, *Inspection régionale des eaux et forêts*) as well as the Sub-Prefect—a local administrator appointed by the central government. They guaranteed that the merchants would buy their charcoal in the forests at a price fixed by merchants at \$1.20 per sack; a price lower than that in surrounding unmanaged areas where merchants worked directly with migrants. A full-time charcoal maker could produce up to 800 sacks per year—two truckloads of 300 to 400 sacks each. (Under the contracts in 2006, forest villagers receive 600 FCFA (\$1.20) per sack of charcoal. The average producer price in non-project areas was 750 to 800 FCFA (\$1.50 to \$1.60) that year, see ([65], pp.123–124.)

Among the rationales given by the Forest Service for the low price, which was enforced by the Forest Service agents, was to provide merchants an incentive to progressively move from non-projects to managed project areas. The rationale made no sense: villagers had to bear the added costs of management while the migrant producers in non-managed areas did not—so villagers had higher expenses and a lower price. PROGEDE went along with this argument, facilitating the cheap sale to merchants of charcoal produced by forest villagers.

After purchase, the merchants would take the charcoal to Dakar to reap most of the profits (roughly \$3 to \$8 per sack after deducting the \$1.20 and all other costs [52]). With one truckload of charcoal, a merchant would make more in a few days than a forest-villager could make in a year—and each merchant handled multiple truckloads per year. This arrangement was tolerated despite that it had been a goal of PROGEDE to enable forest-villagers to sell in the city—where they would be able to add the \$3–\$8 per sack to their own income, jumping from \$1.20 to between \$4.20 and \$9.20. Forest villagers, however, could sell only to merchants with whom they had entered into contracts with at the beginning of each season. PCRs who, by law, hold the legal right to authorize any commercial forestry activity in their jurisdiction, lost this right; the foresters and PROGEDE gave them no say on who could produce, how much, where, or under what conditions.

#### 6.1.2. From 2005 to 2007: Pre-Management with First Management Plans

In 2005, the first set of management plans were finally approved by foresters. Under pressure from project donors and staff, the Forest Service allowed the IVCs with management plans to take their own charcoal to sell in Dakar without the intermediary of a merchant; they could finally reap the profits hitherto reserved for merchants. PROGEDE staff had negotiated with the Forest Service to allow forest villagers access to markets and to promote decentralization and participation in the forest sector. Wula Nafaa also assisted forest villagers to gain access to transportation by contracting with a transporter to help the villagers to take their charcoal to Dakar and hiring a facilitator to

help them sell to urban wholesalers [40,41]. The “test” IVC in the village of Naxembaay (villages and people in this article are given fictive names) was only allowed to sell two truckloads—out of 3000 to 5000 truckloads a year servicing Dakar ([72], pp. 56–59; [73], p. 5) (these figures are based on calculations of urban consumption, the actual figures may be much higher; this is a conservative estimate of the total amount of charcoal produced annually). For these two truckloads—the equivalent of one villager’s annual production—the forest villagers’ income increased 2.5 to 6.5 fold ([40], p. 124). Despite that some management plans were in place, the pre-management arrangements continued for most forest villagers. The few quotas for direct sale in Dakar were “exceptions” to this system in which 99.95 percent of urban sale was still controlled by licensed merchants; hardly an increase in rural participation or incomes.

In 2006 and 2007, as more management plans were approved, each IVC under a management plan was allowed to sell in the city the charcoal produced by its affiliate Village Committees [39,43]. They encountered many obstacles. Their production was low because they were discouraged by low prices. The IVC presidents had to collect the charcoal from village to village as none of the Village Committees could fill a 300-sack truckload (the quantity required to have a transport permit for Dakar). Having access to a truck was very difficult for the IVCs as merchants owned (and still own) most of the trucks that transport charcoal [40,52]. Merchants transported their own charcoal to Dakar early in the season when the prices were highest before they would rent their trucks to IVCs. Thus, villagers got lower urban prices than merchants.

When IVCs presidents reached Dakar, they usually faced unfair treatment by wholesalers. While wholesalers were price-takers when it came to buying charcoal from the merchants; they proposed lower prices to the IVCs. Merchants could store their charcoal and find a buyer later, giving them negotiating leverage. Villagers could not because they had no urban depots and they did not own the trucks—so could not afford to park it while waiting for a better deal. Further, the wholesaler would only take IVC charcoal on credit—without paying the IVC until after distribution and sale. When IVC presidents advanced their charcoal to wholesalers, the wholesalers often did not pay them. (Interviews by Faye with a former IVC president of the forest of Netteboulou, 2008; interviews by Faye, 2009.)

For these reasons, presidents of IVCs rarely made more than two journeys to Dakar each year [43]. By 2008, there were nine inter-village committees in PROGEDE and three in Wula Nafaa producing charcoal under management plans that gave them the right to sell in Dakar [32]. Thus, approximately thirty truckloads were sent to Dakar for village profit. Local profits from urban sale, however, were captured in the subsequent years by local village elites who headed the IVCs as most of them kept the added profits for themselves—not passing it on to the village committee members, the producers [41]. The small fragment of the market profit retained in the villages benefitted only a narrow class of village elites.

With the first management plans in place charcoal was now produced in “managed forests” in project areas with plans and in “non-managed” forests—outside of the projects (despite that the 1998 law mandated all forests to be under plans by 2001). While forest villagers were struggling to manage their forests, produce charcoal and secure space in the market, the licensed merchants with quotas were allowed to produce charcoal in managed forests and non-project areas. In either case, the merchants’ migrant laborers were not required to follow management prescriptions. Here the specious rationalization by foresters and the projects was that the merchants would supply cities with charcoal until forest villagers had enough forests under management to take over the whole job. Thus, merchants remained free of all management costs while forest villagers working in projects were required to bear the burdens of management and low prices.

Inane labor regulations in this period were another means to further channel profit toward merchants—and limit income of forest villagers. Forest villagers were required to produce charcoal themselves under the strict management of foresters and PROGEDE, whether selling to merchants or taking their product to Dakar. The foresters argued that it is illegal to hire the non-citizens

Guinean migrants—so villagers could not hire them. Foresters, however, allowed the merchants to hire these migrant woodcutters, changing their rationale by arguing that merchants had to hire foreign migrants because merchants did not live in the rural areas and therefore could not produce charcoal themselves [65].

These kinds of problems were encountered in the first few years that forest villagers were allowed to sell their charcoal in the cities. Starting from 2006 project staff provide more assistance to level this uneven playing field. PROGEDE and Wula Nafaa hired some market facilitators to seek wholesalers willing to buy forest village charcoal. Both projects also contracted with two transporters to relieve the transportation problems of forest villagers. After these measures, some forest villagers, for the first time, took home \$2300 per truckload by selling their charcoal in Dakar. Rather than earning just \$450 per truckload of 300 sacks for their three to six months of labor, they quintupled their net income in just the three to five days needed to take the charcoal to the city.

In 2008, however, the licensed merchants were still making astounding profits ([74], p. 445). Most forest villagers and migrant laborers working in charcoal made \$450 to \$900 per year (one or two truckloads). Those few village elites who sold in the city made as much as \$4600 per year for two truckloads. Merchants, in this era were making from \$23,000 to well over \$100,000 per year (some probably much more)—depending on their access to quotas and permits. Most forest villager charcoal producers, despite above average incomes, remained poor. This continued through the “management period” as elaborated below.

## 6.2. Management Period: 2008 to Present

### 6.2.1. Institutionalizing Contractualization

The year 2008 was a regulatory turning point in charcoal production and marketing—it was the start of the “management period”. The first key change was that the Forest Service, under pressure from projects, ruled that all charcoal production would take place in forests with management plans. Project directors argued that management plans would make effective the transfer of forest management rights to Rural Communities, as inscribed in the 1996 decentralization and 1998 forestry laws. In practice, however, the plan’s technical prescriptions imposed an outside agenda that decreased local peoples’ control over forests and forest benefits while also diminishing the role of elected representatives [41,42].

Prior to 2008, in areas without management plans, the PCRs were pressured each year to sign agreements to allow production [58,61], see also the film by Faye and Ribot [66]. In 2008, PCRs signatures were needed to authorize plans. However, once signed by the PCRs, the management plans went into effect for twenty years. Thus, signed once, the PCRs unwittingly lost the power to decide over production activities for twenty years (see [42,43,75]). By signing management plans—the condition on which the Rural Community was allowed to manage its own resources—each PCR had signed away his (and they are all men) right to say “yes” or “no” to production or to allocate forest production rights for the duration of the plan (which is most commonly twenty years; some in Wula Nafaa are fifteen years). Thus, the management plans were a new means to exclude elected authorities from forestry. Most PCRs understood this only after signing and following notification by the Forest Service.

A second important decision was the elimination of the quota. The World Bank had been demanding its elimination since long before the inception of PROGEDE in 1998, redoubling its effort in the last two years of PROGEDE-I, ending in 2008. The bank requested the elimination of the quota to liberalize the market ostensibly to favor forest villagers. It is not clear, however, that liberalization would favor the forest villagers—since competitive markets have no profit, although it would certainly undercut the merchants. Liberalization is not the pro-poor measure the authors of this paper would encourage: quota elimination accompanied by high local taxes and high fixed producer prices. Because the Forest Service was resistant to eliminating the quota, the World Bank

threatened to not fund PROGEDE-II were the quota not eliminated. Thus, in March 2009, the Minister ordered the immediate elimination of the quota system ([76], No. 04255). The Forest Service replaced the quota that had been based on previous year's national production with a quantity determined by the ecological potential of each forest as estimated in forest resources inventories. The World Bank was satisfied. The market was liberated from the merchants for the benefit of forests and villagers—at least until it was soon recaptured.

The third important decision was the inception of the annual “negotiation meeting” as a form of contractualization meant to institutionalize decentralization of decision making over the charcoal market. In the 2008 production season the Forest Service ended the system of allocation of production rights that had taken place through a national Ministry of Environment quota-setting and allocation process. Up to 2008 the quotas were simply “announced” at an annual regional meeting. This system was replaced by an annual regional “negotiation meeting” in which the allocation of production rights, based on local production potentials, was to be negotiated. The quantities of charcoal to be produced would be specified for each management plan for each Rural Community based on forest inventories. (People still called the annual estimates “quotas” but we will call them ecological potential or production allocations for clarity. These could have been estimated without an inventory—by “eyeing” the forests as had been done in the past. However, the inventory served as a means of maintaining technical control by foresters over these important forestry decisions.) After the inventories, the estimated forest production potential was then divided between the forest villagers and merchants: villagers were represented by IVC leaders; merchants by the urban forest merchant's union. While the 1998 law states that the PCR determines who will exploit which share of the potential, the shares of villagers and of merchants would, as described below, be determined by “negotiation” between these two parties—between two private bodies, with no controlling role for the PCR.

The head of the Regional Forest Service presides over the regional negotiation meetings. The PCRs attend only to “witness” and countersign the resulting protocols between the IVCs and the union. Each year, during the negotiation meeting, a protocol showing the production shares for each IVC and each merchant is signed between the IVC representative and the union. This was a contract between two private entities. The act of establishing these protocols for each managed forest is still called “contractualization” although it no longer compels forest villagers to sell to merchants at a fixed price—a positive step for villagers that has allowed producer prices to rise. A “negotiated” protocol specifies the quantities each group can exploit, the time period in which production must take place, and other technical requirements. This new system should have given forest villagers full access to urban markets—it ostensibly allowed them to sell their full charcoal allotment where they wanted.

### 6.2.2. Recapturing the Market

In the first season under the “negotiation” system, 2008, forest villagers asked to produce and market 100 percent of the production potential. Foresters, however, only allowed them 75 percent of forest potential allocations—despite that the 1996 decentralization and 1998 forestry laws would give the PCR the right to allocate all to the villagers. That year, the forest villagers claimed that they produced their entire 75 percent. Foresters, however, accused them of not having the “capacity” to produce such a quantity and argued that villagers had cheated by hiring migrants and illegally reselling their production allocation and related permits to merchants who produced in their name (this reselling by merchants and forestry field agents is commonplace). As one high forestry official explained: “it is impossible for forest villagers to produce that amount without undue help” (head of Forest Planning and Production, National Forest Service, Dakar, 27 July 2012). Foresters used this excuse to reduce the villagers' next year's allocation.

Despite the accusations, in 2008 many of the forest villagers reached the lucrative markets in Dakar (interviews, 2011 and 2013). In Dakar, when they were fully paid, they earned on average \$3060 per truckload (almost ten times what they would have earned at the forest edge). Some, however, never received money owed to them by the urban wholesalers. One villager still owed \$1600 said that

wholesalers, allied with merchants, were withholding payments to discourage villagers from selling in Dakar.

Villagers, however, did too well in 2008; so in 2009 a circular from the Forest Service director arbitrarily limited the share of the forest villagers to a maximum of thirty percent of their forest potential ([77], No. 000209). The rest was allocated directly to merchants. Nevertheless, as of June 2009, forest villagers in dozens of project villages in the managed areas got to take a total of about eighty truckloads (the work of about forty producers) per year to Dakar under contracts with merchants. Eighty truckloads, or 1.6 to 2.7 percent of the market, represented a big success. Rural income increased significantly for these forty some-odd villagers. The villager's entry into the market was achieved by great efforts on the part of the World Bank and USAID. However, the eighty truckloads represent a small and insecure share of the thousands of truckloads rolling toward Dakar. Even this tiny share would be curtailed in coming years.

### 6.2.3. Double Standards—"Local Producers" vs. Merchants

In 2010, two new regulations further limited the newly opened market access for forest villagers. The first was in the annual decree by the Ministry of Environment that opens and organizes each production season in January—it is always delayed until March or later. Consistent with the earlier Forest Service edicts, it officially forbade forest villagers from hiring migrant laborers to help them meet their production targets while allowing merchants to do so. This time the Forest Service argued that it aimed to make forest villagers into charcoal producers and traders, so it did not want them to hire migrant laborers whom they accused of not caring about sustaining Senegal's forests because they are foreigners. The same officials argued that hiring migrants was natural for merchants since they live in the city so could not do the work themselves. They reiterated that migrants helped merchants ensuring the regular supply of cities with charcoal. Even PROGEDE staff supported this double standard, arguing: "they [villagers] cannot hire woodcutters [migrants] because we [PROGEDE] have spent a lot of money to train them in how to make charcoal and trade it; it would be a waste of money and time for us if they just hire [migrants] like [urban] merchants" (March 2012 by Faye and November–December 2013 interviews by Faye and Ribot in Dakar and Tambacounda).

A second 2010 rule, announcement by the Tambacounda Regional Forest Service Head, divided each local producer's allocation of the forest potential into two portions: the first to be allocated at the beginning of the season, the second to be released when producers complete their first portion. The second portion, however, could be re-allocated from slower local producers to those who finished earlier. The rule of re-allocation was "the quickest producer wins". This "jackpot system", as frontline foresters in Tambacounda called it, discriminated against the local producers. In this system migrant labor gave urban merchants a big advantage for finishing early. In the middle of each production season, unused villager shares were re-allocated to merchants. This system was a reconfiguration of an earlier system through which the Foresters could reward merchants they favored. In the 1980s through 2000s a portion of the national quota was withheld by the Forest Service in order to reward fast producers (or those who cooperated with them) with further allocations [78], pp. 11–12, see also [62].

The distortions caused by the jackpot system did not end there. An earlier 2009 rule based each year's allocation on the previous year's production. Because forest villagers' second portion was being reallocated to merchants, their following year initial annual shares went down while merchant shares increased. Because their quotas were growing, merchants were allowed to hire more migrants. Village producers, without migrants, simply could not compete given the double standards on this slanted playing field. Villagers who continued to produce after their second-half allocation was reallocated were fined and their charcoal confiscated and auctioned to forestry license holders—that is, merchants (Deputy Blablabla, 9 August 2012).

During the 2011 to 2012 period, the Forest Service further privileged merchants. Foresters drafted protocols to be settled on during annual "negotiation" meetings and pre-negotiated the terms with merchants in advance of the meetings. Merchants bargained their shares up by almost fifty percent.

PCRs said that none of them, nor any of the village committee leaders, saw the draft protocols before being called to the meetings at which these were to be signed (four PCR interviews 2012). The negotiation meeting was used merely to “announce” the annual allocation—as was done prior to 2008. It was, in effect, turned back into a pre-determined quota.

### 6.3. *Small Improvements from a Long Struggle*

Since the local producers had insufficient forest potential allocations to sell in the cities, the majority of them, being discouraged, sold at the forest edge to a growing group of informal merchants called *banabana* (informal itinerant traders) or to licensed merchants. They were usually paid \$4 to \$5 per sack and brought in an average of \$570 per year [40]. This is a high income for a peasant in Tambacounda. Indeed, rural households in this region rely on farming which yields low incomes estimated at about US\$90 annually per peasant [48] and ([50], p. 17). Revenues from charcoal are an important additional support for local livelihoods.

Some villagers, the local elite or the committee leaders, did much better. In 2013 one committee leader sold two truckloads to a banabana at the forest edge for \$2520 each, making \$5040 in net income—over fifty times that of a farmer. Going to Dakar himself would have brought this forest villager \$6120, but selling at the forest edge he avoided the risk of not being paid by wholesalers—something to which local producers remain vulnerable. At this time, urban merchants retained an average of about \$17,350 while the informal merchants, the banabana, were making an average profit of \$5550 [40]. The banabana, of course, are a threat to licensed merchants.

Based on the officially registered amount of charcoal produced in 2011, we estimate that the forest villagers sold about 118 truckloads of 400 sacks in Dakar [79]. Urban merchants sold the rest. From 1998 to 2008 urban merchants’ control of the charcoal market declined from 100 percent to 97 or 96 percent, and then held steady through 2013 [40]. These moderate gains, from 0 to 2 to 80 to 118 truckloads out of between 3000 and 5000 truckloads, were the result of many years of struggle—largely made possible by pressures on government from the World Bank and USAID.

From an initial pretense that local elected representatives of forest villagers would control access to lucrative forest resources and markets, completely replacing merchants; the system in place confines most villagers to a survival strategy—most local producers can only sell to merchants or banabana at close to a subsistence income. The higher incomes are an exception. Most forest villagers are so discouraged that they only produce a limited quantity and sell it when needed to supplement basic needs [40,43]. Commerce, and profit, is reserved for a few village-level elite and for legal and illegal urban merchants.

In the face of legislation that should have placed merchant control at zero percent, merchants and their Forest Service allies have creatively adapted the system to their needs. This is adaptation—replete with survival of the “fittest”, or at least the politically strongest. They have managed to keep forest villagers in their traditional prone subordinate position—exposed to the elements with few assets to protect themselves from expected dry spells.

## 7. Conclusions

In Senegal’s charcoal market, foresters engage in many quiet and grinding forms of violence that reduce the wellbeing of forest villagers. We call these violence because they create a great “difference between the potential and the actual” realizations of forest villagers (see Galtung [1], p. 168). Forest villagers are relegated to low prices by a state-supported merchant oligopsony. They are subject to required labors, or participatory *corvée*, in implementing forest management prescriptions. They are excluded from opportunities through licenses, permits, quotas, “contractualization”, and “jackpots” that make forests and markets into centrally allocated merchant property. They are forbidden to hire migrant laborers that merchants are allowed to hire. In addition, there are many other means of violence we did not cover, such as differential application of fines and confiscations, along with

the cheap sale of confiscated products to the merchants [15,22,38–43,51,52,56,58,65–67,72,74,75,80]. These are everyday means to siphon off the wealth of the poor. Their precarity is overdetermined.

These mechanisms work partly through double standards [38] that differentiate villagers from merchants, and through the casting of decisions as technical [41,42], claims that villagers lack capacity [38,58,67], restricting local producers' access to labor and markets while loading them with burdens [41,42], and selective application of laws [40,43]. The local producers were confined, by Forest Service regulations, to labor in management and production. Local producers are made into subordinate citizens—holding inferior rights to those of merchants—relegated to subsistence [39]. This confinement, or hemming in, is part of the production and maintenance of a vulnerable class, the precariat. It is the “adverse inclusion” whereby people are incorporated into and subordinated to profoundly unequal power structures (see [14], p. 86).

It is worth noting that this term capacity, overused in adaptation discourses, carries two dangers. First, already noted, is the blaming of the victim—placing of causality within the affected person(s), thus *diverting attention* from the social. Second, in development speak it indicates a need for training. It is a term predicated on modernization theory that posits that these people are ignorant and that training them is what will fix their problems. They lack capacity, so train them. When practitioners say “adaptive capacity”, most run off to design their next training program rather than to analyze the political economy that produced the marginality that disabled people. In this sense “capacity” *diverts action*. Both diversions contribute to what Rose called a “death of the social” [81], an erasure of social cause beyond the individual.

With established distinctions between “local producer” and “merchant”, double standards can be applied. The forest service freely invents merchant-favoring regulations that selectively apply, contradict, break and change laws [43,54]. These appropriations are reinforced by the attenuation of local democratic representation in a situation where merchants can already influence the state but peasants cannot. Such disenfranchisement—the dismantling of local democracy—is a long-standing means for preventing peasants from influencing the regime that shapes their entitlements and security [18,22,23,25,26]. State agents adeptly invent and apply these distinctions. Through these differentiating instruments of structural violence [1], they diminish the potential life options of a whole class of people whom they make into weakened citizens [39]. These are instruments in the repertoires of domination that powerful actors draw on to subordinate the rural poor [74]. They produce marginality and vulnerability and precarity, enabling and perpetrating injustice [39].

The case of Senegal's charcoal market shows how skewed power relations between a merchant-administrator cabal and forest villagers has deprived most forest villagers of three foundations of their security: access to resources, access to markets, and access to representation [80]. They were deprived of the assets they needed for desired beings and doings (*à la Sen* [25]), they lacked basic wellbeing and security, and they were denied the representation that could have enabled them to shape the political economy that shaped their assets and social protections [18,23,24]. By denying them income, forest villagers were kept poor—at the cusp of disaster. By depriving them of representation, they were maintained as subjects (*à la Mamdani* [82]) of a regime they could not define. It remained a regime of and for commerce and agents of government—who profit handsomely. We could call it a low-adaptive-capacity “regime” managed by government and merchants for exploitation and extraction—in sharp contrast to characterizing it as an authorless biophysical “system”. This is a regime in need of social and political explanation and transformation.

Development projects were also part of this regime. They intended to turn it around. The World Bank's PROGEDE staff aspired, like the neighboring USAID Wula Nafaa project, to improve rural livelihoods and income. Indeed, these projects had their successes in improving income generation [68,69,83,84]. However, in the lucrative forestry sector they only partly countered the repertoire of shenanigans that the Forest Service used to enable urban merchants to capture the wealth of the rural poor. Despite incremental progress, they were not transformative; they could not sufficiently strengthen local representation, dismantle the merchant oligopsony, fight the Forest

Service, or weaken the merchant-Forest Service cabal. Villager access to the resource, to markets, and to representation remains systematically denied.

Three access [15,52,75] denials—access to resources, markets and representation—deepened forest villager poverty and precarity. These three denials are themselves a product of entrenched hierarchies [13,85], involving patronage relations that are endemic within Senegal’s government ([52], p. 134), and international development projects unwilling to challenge the partnering governments (Interview with the focal point of PROGEDE at the World Bank, Dakar, 27 January 2014). Transformation would require a focus on patronage and corruption, impunity and illegality, movement toward substantive representation in which people could hold their leaders to account and in which leaders—at least the local ones—could exercise the powers given to them by law. It will require us, as Taylor ([14], p. 8) says, to examine and understand “how different forms of power are produced across spatial scales that facilitate some actors to influence, profit from and find security, while others are disempowered, marginalized and made vulnerable within the context of ongoing socio-environmental transformations”.

The incremental changes that projects fostered over the years have created fissures in the existing socio-political arrangements in Senegal’s forest sector. An emerging class of village elites and of illegal *banabana* merchants, fostered by the past three decades of projects and reforms, may erode and challenge merchant dominance and its forester backing. These increments may yet become transformative—enabling a more-equitable local enjoyment of the profits from the forests of Senegal. These profits could increase local abilities to navigate all kinds of stress and change. However, the gains are too easily retaken by highly creative adaptive dominant classes with a large repertoire of dominating acts that maintain the status quo.

Micro-focused adaptation projects are not certain to eradicate vulnerability or build this critter called “adaptive capacity”. To be effective interventions should also take aim at transforming the political-economic context. Adaptation programs need to target structural arrangements—that reduce people’s potential to adapt and to thrive. If we help people to gain income and assets that will be squeezed back out of them by the next creative administrator or market elite, we have done little; perhaps we have maintained the ongoing unequal structures of access to resources, markets and representation. If we see precarious people as merely poor, left behind or lacking capacity, rather than as subordinated and marginalized by policy and regulation that excludes them from resources, markets and representation, then we are left where we began—in a regime of vulnerability production where the precariat adapts merely by coping. Adaptive abilities need to be transformed by emancipation—they must include the ability to meaningfully influence those who govern. They must include real political representation so that the poor can demand adaptations or transformations that counter the processes that place them at risk.

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