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# The micropolitics of coal in India: understanding resource politics from the ground up through a materiality lens

Patrik Oskarsson <sup>a</sup>, Kuntala Lahiri-Dutt<sup>b</sup> and Nikas Kindo<sup>c</sup>

<sup>a</sup>Department of Rural and Urban Development, Swedish University of Agricultural Sciences, Uppsala, Sweden;

<sup>b</sup>Crawford School of Public Policy, Australian National University, Canberra, Australia; <sup>c</sup>Technology Studies, Ecology, Development and Labour, International Institute of Information Technology, Hyderabad, India

## ABSTRACT

Coal in India carries different values and meanings for different actors. Consequently, the politics of this resource is manifested in multiple forms at multiple levels. Whereas the extraction of coal is accomplished by a larger resource politics involving an energy crisis narrative and a need to ensure national resource security, people at the grassroots level – workers, security forces, the displaced, administrators, mine planners, and a wide range of other actors – engage primarily with the micropolitics of coal. In this paper, we draw on new materialities literature in human geography to demonstrate that the everyday micropolitics of coal in the eastern Indian state Jharkhand is more than a subset of national or regional resource politics. In doing so, we analyse four vignettes through a materiality lens based on the land use, weight, pollution, and heat of coal. We use ethnographic methods to untangle everyday and long-term micropolitical trajectories related to coal extraction. We show the fluid and often interchangeable and overlapping roles of actors at the coal face: revolutionary groups striving to become mining contractors, contractors working as politicians to mediate claims, and politicians assuming the role of revolutionaries. Meanwhile coalfield residents make moral claims of indigeneity to gain a share of the resource, or eke out informal, coal-based livelihoods. In this fluid setting, the actors in the micropolitics of coal are influenced by outside forces to varying degrees, and are yet able to reimagine resource politics to their own advantage.

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## Introduction: resource politics from the ground up

Indian coalfields are simultaneously places of forced uprootedness from previous ways of living, and sites of hope for a better future as new groups move in with aspirations for improved job prospects and a better quality of life. A wide range of micropolitical expressions and claims shape resource politics seen from the ground up. Some groups are able to draw on indigenous identities to make moral claims over land and resources (Lahiri-Dutt 2017; McDuie-Ra and Kikon 2016). Others draw on kinship networks or informal connections to progress (Lahiri-Dutt 2016). Still others pull together via social movements, join revolutionary groups seeking to overthrow the Indian state, or simply resort to arms to extort income from coal (Shah 2006; Shah 2022; Sundar 2016). At the top of the coalfield hierarchy,

**CONTACT** Patrik Oskarsson  patrik.oskarsson@slu.se  Department of Rural and Urban Development, Swedish University of Agricultural Sciences, Uppsala, Sweden

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a small elite of formally educated people with professional degrees have jobs in the modern economy, and a reserved space in the coal company compound (Hann and Parry 2018; Nayak 2022). In such fluid coalfield settings outcomes are never part of a coherent and neatly organised plan. They are rather constantly in the making with highly uneven and contested experiences for different individuals and groups who are part of the micropolitics of coal.

Understanding highly varied and often fragmented micropolitical expressions related coal have never been more important as urgent national and global programmes to transition to cleaner forms of energy are being deliberated, formalised and launched (see e.g. World Bank (2023)). The question is what forms energy will emerge via these and other interventions, and with what social effects. Energy transition literature focusing on justice aspects are to date based mainly in the Global North (Harrahill and Douglas 2019; Heffron and McCauley 2018), although there is a growing literature on just transitions in the Global South (Cock 2019; Xaba 2023). It is clear that transitions in a Global South country like India must be wider in scope: in considering justice we need to look beyond the formally employed in the coal sector to take account of the vast, informal economies of coal in search of more sustainable forms of energy and livelihoods.

In this article, we embrace an ethnographic approach to understand how localised practices and perceptions produce different forms of politics in relation to coal. Coal is a resource that cuts across regions, geographies and regional scales in India. In order to understand political responses at the micro level, we examine the multiple ways in which ordinary people experience and relate to coal. We argue that people in the coalfields are part of the material world of coal and sense its opportunities, but also pay the heavy costs of living with and from it in their daily lives. Since the ground is often on fire, the heat of coal is literally felt, as people assume multiple roles and positions in relation to it, and in their interactions with the wider world. The result is the creation of a multiplicity of political expressions that are usually not present in macro examinations of resource politics (Kabra and Mahalwal 2019; Moore 1993). By appreciating the multiplicities that shape resource politics at the local level, we can better understand and value the agency of individuals and groups, and their ability to reimagine relations to vital resources. This perspective is typically missing in extractivist accounts of indigenous mobilisation against mining (Gilberthorpe and Hilson 2016), or in the wider dispossession and land grabbing literature (Edelman, Oya, and Borrás 2016; Levien 2018).

The next section engages with existing theoretical perspectives on micropolitics and details about our methods. Following this we present four vignettes that highlight the micropolitics of coal. Using these vignettes as illustration, our intention is to show how the materiality of coal imbricates everyday politics at the coalface via four themes: land use, weight, pollution, and heat. Finally, in the analysis and subsequent conclusion we discuss the importance of multiplicities in shaping micropolitics.

## The micropolitics of a national energy resource

Resource politics is commonly understood at a macro level as national security, social movement protest, environmental protection, or geopolitics, and is often investigated through frameworks of political economy and political ecology (Bebbington et al. 2018; Bobbette and Donovan 2018; Huber 2019). Micropolitics is not unrelated to these wider discourses and structures but is often conflated with, or treated as a scaled down version of, these macro-scale events, phenomena, and processes (see e.g. Ghiabi 2018). How for example the poor and/or the rural peasants assert agency by engaging in political acts that we might not even recognise as falling within the domain of conventional politics has been the subject matter of much research (e.g. Scott 1985; Vandergeest 1993). In spite of the growing interest in micropolitics (see e.g. Horowitz 2011; Jellis and Gerlach 2017; Kabra and Mahalwal 2018), the very concept remains contested and continues to be ambiguous.

As we seek to untangle social categories at the coal face to understand multiple and overlapping forms of resource politics, the coal politics we seek to explore are not only “local”. The micro is

neither simply a smaller part of wider macro politics, nor treated as completely separate from macro structures and events (Regassa 2021). Rather, along with Nightingale (2018), we see the micro as simultaneously produced by and productive of wider political ecologies. This allows us to see coalfield residents able to reimagine resources in spite of the heavy dominance of India's national energy security priorities that rely on coal, and the overlaps with national security due to the long-running Maoist insurgency in this part of the country.<sup>1</sup>

The goals of national policymakers on energy, security and economic development at a macro level are of course important, and do have various impacts in the coalfields. Similarly global coal markets and new extractive technologies exert influence even at a relatively insulated Indian coalfield (Lahiri-Dutt 2014). Increasingly "efficient" coal mining via open pit mines use up ever larger areas of land and rely on mechanised equipment rather than the physical labour of workers to alter core aspects of land and labour politics in the coalfields. It is, however, not clear how the different programmes and ideals formulated in key centres of political and commercial power unfold, either intentionally or unintentionally, in the everyday lives of people who have been dispossessed by vast, open cut mines. It is even possible that the mines, or various side activities, become new opportunities for work with transformative potential for individuals.

Perhaps the most authentic view of coal comes via the extensive informal sector, where people lacking the education and political connections needed to become a part of the formal economy, navigate often precarious spaces. In the enormous informal economy people enter mines or loading sites to gather as much coal as they can carry, or seek out spaces to extort a bit of money for the "safe" passage of coal from mines to the power generation facilities (Oskarsson 2017). As people take on multiple roles in relation to coal at the micro level, it is not clear how regular political economy frameworks with their neat, separate categories apply. As we outline in this article, individuals and groups at the micro level, find new ways to stake political claims to resources like land and coal in spite of powerful macro-political interventions. Such claims are, in part, responses that allow people to merely survive, but also at times, produce new wider structures able to influence regional and national politics.

We argue that it is possible to explore the micropolitics of coal via the different material impacts that coal has on different people in the coalfield. Literature in human geography has extensively explored how qualities of biophysical and built nature interact with, relate to, and affect social relations, and vice versa (Bakker and Bridge 2006; Castree 1995; Swyngedouw 2006). In such accounts resources are not only used, or even produced by, humans, but at times also generate human relations and social effects through their biophysical characteristics. A materiality lens allows us to explore some of the different aspects of what coal *does* at ground level, and the multiple forms of politics that emerge as a result of these material characteristics.

## Methods

We specifically explore micropolitical expressions based on four material characteristics of coal: land use, weight, pollution, and heat, respectively. Firstly, the extraction of coal in open pit mines use large areas of *land* legally reserved for indigenous populations.<sup>2</sup> Secondly, the movement of *millions of tons* of coal from the pits to power plants allows the coal mafia to extort money for "safe" transport.<sup>3</sup> Thirdly, environmental *pollution* from coal extraction and use is supposed to be taken care of in the environmental clearance process, but usually fails to hold extractive operations to account.<sup>4</sup> Finally, the *heat* of coal is put to use in brick-making units, which depend on "free" coal as input.<sup>5</sup>

The empirical material is explored via four brief vignettes<sup>6</sup> to showcase cross-cutting politics in the coalfield. In fluid coalfield spaces we find actors take on a multiplicity of roles and positions in relation to this key resource. By showcasing four such micropolitical vignettes we reveal different social and human experiences of coal, and how these shape different political responses by the actors involved. We are aware that such brief narratives cannot encompass all of the micropolitics of a natural resource, either in India or in relation to other resources across the Global South. This

is, however, partly the point: there is no one comprehensive perspective that may be presented of the micropolitics of key resources like coal, which are always situated and relational.<sup>7</sup> Our vignettes are thus in a sense “uneven” as they operate at different scales, use different timelines and rely on different methods to provide “[d]ifferent starting points [able to] bring into view alternative dimensions” (Nightingale 2016, 46) of coal politics. It is this uneven account that we argue is essential for understanding the range of micropolitical expressions that exist at the coalfield.

Methodologically our four vignettes draw on our collective engagements with coal in India over more than 20 years, but also on recent ethnographic work carried out by the authors in and around the North Karanpura coalfields in Jharkhand from 2015 to 2021. Vignette 1 is based on an interview with a leader of the Sarna movement of Jharkhand state.<sup>8</sup> It highlights the continued relevance of land but from the new angle of indigenous, religious teachings now finding macropolitical support in a country ruled by a Hindu nationalist government.

Vignette 2 draws on direct ethnographic engagements by one of the authors who, during fieldwork, unexpectedly met up with a group of people identified by respondents as members of the coal mafia who extort money by controlling transport routes out of the coalfield. In tracing the influence of the coal mafia in this vignette, we see much more than mere extortion, however, including the interconnections between violent gangs, public protests, business people, and the local administration.

In Vignette 3, we rely on media reports and official documents from public hearings and village council meetings to discuss how national regulations play out as competing interests meet in the environmental approval process over a thermal power plant proposed by the Indian company Adani Group from late 2016 to 2020. Two separate pieces of legislation are involved in the account: (a) the environmental approval process; and (b) the *Gram Sabha* (committee of village residents) approvals for land acquisition. The environmental approval process includes public hearings, crucial meeting grounds for a wide variety of opinions and positions on coal, which are otherwise not heard or discussed in public. This includes, for example, land compensation, job opportunities, investments in various forms of infrastructure in the project area like roads, water and electricity, and many other topics that cannot easily be considered as relating to environmental management and pollution control, and yet find no other suitable venue for discussion. Tony Herbert, a long-term Jharkhand resident, compiled the vignette’s “Diary of Resistance” from news sources and local contacts to provide this account of the drawn-out process of environmental approvals which does not regulate environmental concerns successfully, and even less provides a venue for debating and settling claims around the industry and its many local socio-economic effects.

Vignette 4 is, like vignette 2, based on ethnographic research by one of the authors. It incorporates personal interviews of coal scavengers that allow us to understand experiences of marginalisation and job loss over time that have left the respondents, and most people of their village, relying on “stealing” coal as the only livelihood available to them. The respondents reflect on how the cement factory they initially worked in closed down, and the subsequent work as manual coal loaders. This second job similarly came to an end as protests about the hard and inhumane work to load coal resulted in the introduction of mechanised loading points without alternative jobs provided to the workers. As the formally unskilled workers were unable to find new work in the midst of a swiftly expanding coal region, they have come to rely on the informal economy for their livelihoods.

## Four genres of micropolitics

### *Vignette 1: land use – moral assertions of the indigenous*

Moral claims over coal take different shape in different places. As Steur (2017) points out, the indigenous are usually mobilised by civil society as the rigid defenders of homogenised forms of unchanging life. The upstanding and even moral character of such groups of people find much support against the widespread changes brought on by open cut mines. And yet, opening up categories

such as the indigenous to the intersecting categories of class, gender and caste may allow us to better understand the different engagements of populations, indigenous or otherwise, who are simultaneously pursuing continuity and change as their areas and ways of life are affected by vast resource projects, but also various other societal changes (Oskarsson and Sareen 2020). In this vignette we discuss moral claims of the indigenous in relation to the reduced impact of rights-based movements in recent years.

Coal has been mined since the nineteenth century in the area that now comprise the state of Jharkhand. From the early days collieries engaged *adivasis*, India's indigenous groups, as employees, but the mainly Hindu *zamindaris*, the old landlords, owned the mines (Rothermund and Wadhwa 1978).<sup>9</sup> In 2000, Jharkhand was carved out of Bihar as an independent state to assert indigenous rights. An indigenous political elite continues to dominate Jharkhand, and the rhetoric of indigenous statehood finds strong support among the electorate. The rhetoric of indigeneity has thus far allowed for certain claims to be made at state level, based on a wider notion of the adivasi moral right to resources, while much of the benefits accrue for the elite, and a myriad mineral-based industries and smaller businesses owned by non-adivasis (Lahiri-Dutt 2017).

Three common characteristics affect land relations in the coalfields. First, new mines are since the 1980s exclusively open cut instead of old-style underground. Second, these mines have large ecological and social footprints on land traditionally inhabited by adivasi groups. Third, mining companies outsource much of the actual mining work, including mining, waste management, and transport operations, to private contractors. These three characteristics relate to and reinforce one another: open cut mines displace adivasis and destroy forests, forcing them to search desperately for new livelihoods, often ending up as cheap labour toiling precariously on or around the same structures that have displaced them. Much of the available work is in the informal sector or among subcontracted private contractors. The process of coal expansion, therefore, frees up labour, turning sedentary indigenous communities into footloose, itinerant workers toiling for wealthy businessmen contractors from nearby towns or cities.

Land grabbing at the coalface is carried out not only by the mining company but by a range of intermediaries intent on affecting outcomes, or merely speculating in increased land values. In highly controversial processes the micropolitics of land play out incrementally with wide scope for local rearrangements which align with swiftly variable protest movements, corruption, negotiations with pressure groups and other forms of political expressions. Within these processes the indigenous make claims based on moral rights to coal. During the 1980s and 90s strong movements across central-eastern India with significant adivasi presence were built around demands for *jal*, jungle and *jameen* (water, forests and land) resulting in broadly improved land consultation and compensation policies in India and internationally (Khagram 2004), followed by a strengthening of community rights to forests in the 2000s (Kumar and Kerr 2012). In the 2010s the broad-based rights discourse has, however, proven to be less successful. This is especially apparent since the return of the BJP to power nationally in 2014 indicating a turn to nationalist, religious arguments. Consequently, land movements in Jharkhand have needed to evolve. One activist expressed this in an interview in early 2021<sup>10</sup> as follows:

[S]ince the year 2000, after the success of the Jharkhand movement, we got the separate state and people went back to their old routine. Adivasis went to agriculture again while those who got some employment settled in cities, and adivasis continue to be nowhere when it comes to business. Business still is in the hands of non-adivasis – they take the advantage of minerals and markets, it is not adivasis [benefitting].

In this context the Sarna movement builds on the “success” of Hindu nationalism across the country, while presenting a separate, locally based vision for adivasis in Jharkhand:

At least what we have today is [the ability] to bring a big adivasi population to one platform in the name of Sarna Religion. And this has gained popularity too as nationwide Hindu nationalism is gaining popularity. The sentiments are when Hindu Nationalism can evolve and change the politics, then Sarna religion can also be cultivated.

While other religious groups tend to stay away from making overt political claims, the Sarna movement leader not only discussed spiritual claims as being relevant for electoral politics, but directly connected these to land issues when saying that

[...] for Christian adivasis there is the church and for Hindu adivasis there are temples, but when it comes to projects like mining, roads etc, it is only the Sarna sthal (place of worship) that is demolished. The faith of sarna adivasi is so downgraded when it comes to institutions. We have never seen any temple, church or mosque demolished, but when its came to Sarna religious spaces, anyone claims, captures, and demolishes them. The Jharkhand movement was an adivasi movement [...]. People have died but today adivasis are nowhere in their own state and don't know how to safeguard their religious spaces.

While not directly participating in site-based land struggles the sarna movement leader expressed concerns for the loss of non-religious adivasi land when stating that nowadays

[...] no project becomes an issue to discuss, and does not mobilize a big movement. [...] Before an adivasi vil-lager comes to know the full background, the land transfer is complete. And what to do when the adivasi leadership itself says *khanij ka dohan jaroori hai, rajyae ke vikas ke iyae* (resource extraction is necessary for state development)? The same adivasi leaders once part of the Jharkhand Movement are now the shareholders of profit-making companies. [...] Nowadays self-styled<sup>11</sup> activists are in no position to convert the land issues into big movements. These activists are unable to connect the value of land with the adivasi, which needs an unbiased campaign, good effort and also good resources. Today activists want to be politicians, have quick fame, and become the envy of other activists. They are not connecting with the larger adivasi population. The *jal, jungle, jameen* notion needs campaigning as it was in the days of the Jharkhand Movement. The leaders of the Jharkhand Movement is today's politicians who talk of the needs of the state and money from its resources.

In this context the Sarna movement leader claimed that “[c]ompensation, and employment are just traps of today's time and we all know how this has not helped adivasis in the long run”. In spite of this negative assessment of the possibilities to organise adivasis to demand land rights, the Sarna movement clearly indicates that moral claims to resources can still mobilise large numbers of adivasis. The shared sense of belonging across different adivasi groups, and long-standing exploitation of resources by outsiders, continue to generate potent political responses in the region.

### ***Vignette 2: weight – extracting money from the movement of coal***

Bollywood movies tend to portray coal regions as dominated by criminal gangs who use violence to extort profits.<sup>12</sup> Among our respondents in the coalfields of Jharkhand, the “coal mafia” refers to people with guns, connections within the administration and other influential groups, and a capacity to establish fear and domination over particular coal transport routes or key loading sites. Because they exert control over the movement of coal, the coal mafia is a key part of the micropolitics of coal able to siphon off money not only for themselves but also to a wide range of other actors. To do this they, however, require active support from both the administration and, perhaps surprisingly, Maoist rebel groups who fund much of their opposition to the Indian state from resource control activities (see e.g. Shah (2006)).

Our ethnographic account below outline events related to a protest against increased pollution and traffic from one of the many new railway coal loading sites built in 2014–2015. The protest movement was led by small business owners and other influential people in the area who had focused their activities on the proposed transformation of a former cement factory grounds into a coal-loading site. In this manner, public protest ostensibly about local coal pollution, turns out to have close connections to the coal mafia, but also to local business people intent on protecting their coal trucking contracts.

#### ***Day 1***

My field associates introduced me to a group of small brick and sand contractors who work for business people organising a protest meeting. I asked the contractors about shootings rumoured to have occurred a few days back and one of them replied:<sup>13</sup>

You want to know how shooters work in these places? It is a fight for existence my friend, otherwise these banyas (business caste groups) will take everything, all the contracts, and will engage their own people for work. This always happened in the past, otherwise why local villagers and we people who have worked here and our ancestors have not taken advantages? The baniya community is very clever, they can buy the police and the administration, and have their own lobby in politics because they have money. We don't have money but we can do thai-thai (shooting), otherwise we will get nothing.

I requested more time to talk with them in detail. As I was with my field associates and they all knew each other they agreed to meet in the evening at a small store that serves chicken and beer. During this conversation I was told:

In the coalfields there are tons of money but one should know how to get hold of that money. The foolish will remain day labourers, but the clever will play with that money. The only thing one should know is to collaborate with others, and keep a low profile otherwise someone will eliminate you.

One of the contractors was a member of the Singh<sup>14</sup> coal mafia gang. He stated:

I work for the group and yet I am unknown. My work is to ride in a Ford Scorpio at night and keep an eye on activities. Like who is meeting with who, whose tender is working at the loading sites, and if some problems appear, then who is causing these. This is my only role and I receive Rs 15,000–20,000 per month and that is enough to run my home. But this work is dangerous, people were killed in the past in some gang wars or unexpected shootings so no profession is safe here. People constantly join and leave our group so there is always requirement of people. And we also get some training to operate small pistols. Railway loading sites face a lot of threats so our duty is to see if operations are working smoothly and to identify if some unknown people visit there, mostly during nights.

From this discussion it became clear that the contractors' group wished to protect business opportunities for truck transport companies rather than support villagers affected by coal pollution, as the protest during the day had indicated. After many drinks my field associate said: "Let us meet with big brother some time". One of the coal mafia members said: "We will inform him about you and will see if he wants to talk. We will call you once we confirm the meeting".

### Day 2

The following evening my field associate and I visited the same store. The coal mafia leader Santosh Singh was there with three other people. A Nepali man introduced me: "Dada (big brother), [...] he is from the outside. [...] He wants to meet you". Santosh Singh was very angry: "There is a lot of pressure from top, at Tandwa (a nearby town) party people [Maoists] are searching for our group members. Two have been beaten and you people are amusing yourselves here". To me he warned: "You should not have come to this place. The police can raid places like this any time and even organise encounters [killing a suspect], and later say that we shot mafia gang people. Politics are cruel and brutal, when your friend will be your enemy no one knows". Addressing all he said: "Ganjhu<sup>15</sup> was roaming with police as informant, a few days later they shot him labelling him as being with the party". I requested a time to meet and Santosh agreed: "Tomorrow we will do baithiki (a meeting with a purpose) in the evening, but not here".

### Day 3

The meeting with Santosh Singh took place in a tribal village where the main livelihood is to make illegal mahua liquor from the flowers of a local tree. We entered a home with brick walls and an asbestos roof. In one corner a man was counting money. He looked happy and said: "This time Dada (referring to Santosh) has played a big game. The contractor of the railway siding (coal loading site) have to listen to us, something big will happen for us". It was clear at this point that the entire village was participating in the protest against the railway loading site. As compensation for their participation, they were served a good amount of chicken pulav (a rice dish) in the evening, and were paid for the liquor they had produced. A village member of the protest movement commented:

The environment is getting worse. In summer the coal dust will affect the whole region from the new railway loading site. Are we here to keep silent and eat dust while they earn? They [the Santosh group] also have to do business so they are supporting us. Without us how will they operate in this region?

Soon the protest would be over however: “Negotiations have been completed so tomorrow we will close the protest”.

From these conversations it became apparent that the protest movement was planned and supported by businessmen backed by the coal mafia in order to gain a share in contracts from the big contractors. Assuming I had connections outside of the coal region, I was then asked if I had any contacts in the government, and if I could assist with a coal lifting contract from the Adani Group, one of the main coal business groups. Such a contract would be in the hundreds of crores [1 crore is equal to 10 million rupees].

Around 10 at night Santosh Singh appeared, drunk, to share his views:

At one time I tried too to establish my own power lobby. In those days we were in the business of local liquor which was in demand by Coal India employees. I tried to establish a stronghold but was arrested according to the Arms Act for keeping ammunition and guns. When I went to jail my influence collapsed.

Santosh further explained that the main purpose of the coal mafia is to control the movement of coal out of the mining region. The rate for “safe” passage out of the coalfield is fixed at 300–500 rupees per truck, depending on truck loading capacity, with thousands of trucks leaving every night throughout the year. This money is divided between the coal mafia, three locally operating Maoist groups<sup>16</sup>, the police and the bureaucracy. The different groups, including the police, meet in secret at different locations and drink together over the settlement of money. The Singh group’s system of collection varies. Because they have very close connections with one Maoist group, they sometimes take levies directly in its name. The fear that this Maoist group provokes in the region usually ensures that truck drivers and business owners pay the requested sums. The police also have links with the coal mafia group and receive their share. In fact, the police, like the civil administration, pay to be posted to the coal region. The officials are aware that it is enough to be posted here for two years to settle their immediate money requirements.

Santosh Singh has not been heard of since 2015. According to field associates, the group is currently not visible but this does not mean they are not working. They may have shifted their base, or they may have undercover operations. On a visit in 2019 there was hardly any mention of coal mafia gangs and there had been no recent reports of gang clashes or killings in the news. Some members are known to have changed profession due to delays with monthly payments in 2015 after the presumed death of the leader.

### ***Vignette 3: pollution – the politics of environmental approvals***

In our third vignette we explore the politics of administrative approvals via Environmental Impact Assessment (EIA) reports and related public hearings close to proposed mining sites. Activists and social movements have long been engaged in “EIA struggles” (Nielsen 2017), over the mandatory, national environment approval process as a window into governance processes around India. Over the years such processes have become increasingly formalised, with improved access to courts and central government inspection panels travelling around the country to follow up on specific complaints (Bedi 2013; Sinclair and Diduck 2000). The EIA report and its associated public meeting are thus crucial for understanding of how official planning processes around coal pollution with clauses for participation meet a wide range of claims in the coal regions. As is typical of other governance processes in India, environmental legislation faces frequent amendments in overlapping procedures between federal states and the nation. Furthermore, changes in interpretation and implementation depend on the goodwill and active cooperation of state-level authorities who are often not from the same party that dominates the national government. The result is that much of the national procedures are worked out in everyday micropolitical actions at the sites of implementation.

Long-term follower of Jharkhand state coal issues Tony Herbert notes that:

the running of the public hearing seemed to follow the pattern experienced by other public hearings in coal mining areas. A way was found to restrict the presence of the local landowners, outsiders were called in, the seats taken by contractors and company people. Speeches were given about technical details of the project, the benefits to the local people, a show of hands was asked for by those in favour. Those who tried to raise threatening questions or negative viewpoints were not allowed to speak, or cut off. The outcome is a doctored report to go to the State MoEF [Ministry of Environment, Forests and Climate Change], and the Centre. The issues are: the manipulation of the one occasion where landowners can raise their voice; the mining being done without consent of affected people; inadequate surveys; the use of paramilitary force against protestors; the continued use of non-renewables; and the support of the national government for the company. (Personal communication, 2019)

On 6 December 2016 the Adani Group held a public hearing for its proposed 1,600 MW coal-fired thermal power plant in Godda District in Jharkhand. Adani had originally applied for 2,200 acres of land, but later settled for 1,500 acres. The project would impact 841 families or 5,339 individuals. According to press reports, a District administration official claimed the public hearing was successful, with land holders welcoming the plant and agreeing to cooperate in setting it up (The Telegraph 2016). On January 9, 2017, a fast led by opposition politician Pradeep Yadav was held to demand the public hearing be cancelled. The public hearing, unlike what was reported in December, had been disrupted by a police *lathi* charge (police violence), with the venue allegedly taken over by outsiders, not those about to be displaced. Meanwhile the state government gave assurances that nobody would be moved from *gair mazurwa* (common property) land for which land holders would not receive recognition, if they had been long settled on it (Chandrasekhar 2022; Choudhury 2018).

On 8 February 2017 a delegation of land owners led by Pradeep Yadav met the top administrative officer, the District Commissioner, to stop the land acquisition. They presented the following points: there was no representation of local people at the public hearing; the social impact assessment report prepared by Mumbai-based AFC India Ltd ignored ground realities and did not consult local people; the district administration worked together with the Adani Group; and there was violence at the public hearing between the police and villagers. In addition, the so-called consent given to the Adani Group was based on thumb impressions and signatures on a document that did not even mention the proposed power plant (Dainik Jagran 2017).

On 6 March 2017 The Times of India (2017) reported that “[o]ver a dozen protesters, including women, were injured when police resorted to lathi-charge during a public meeting [public hearing] conducted by Adani group in Godda on Sunday. However, the opposition and government agencies have issued contradictory statements regarding the conduct of affairs at the public meet”. The opposition protested against the 100–150 outsiders that had been brought to the meeting to influence outcomes. The company, on the other hand, claimed that villagers were happy to receive four times the market value for their land. On 8 March 2017, the last phase of the *Gram Sabha* meetings concluded peacefully in seven villages. Teams of district officials, representatives of the Adani Group, and *Gram Sabha* members participated. Police were deployed and the entire process was video-recorded as consent was taken in writing.

On 4 May 2017 local media reported that the Adani Group had delineated 900 acres of land for the power plant. They had completed the social impact assessment report, and the public hearing had also been completed. The Adani Group emphasised its investment of 150 billion rupees (about USD 2.3 billion) in the project which would employ 10,000 people, directly or indirectly. All the land to be acquired across nine villages is privately owned. Since forest land, which requires a separate central administrative approval, would not be affected this made it much easier for the company to acquire land. Final negotiations around compensation have been going on for years, and it is expected that the amount will be up to 5.0 million rupees (about USD 74,000) per acre depending on the nature of the land. At this stage the company was confident that land issues would be settled in the next few months (Mishra 2017).

The first environmental clearance, affecting 1,363 acres of land, was awarded in August 2017 and soon after initial construction commenced. Almost all land (89%) was privately owned, indicating the

heavy toll on local farmers. However, no forest land was acquired (MoEFCC 2017). In September 2019, the power plant was subject to a revised environmental clearance specifying reduced land use of 1,255 acres with 460 acres to be used by the 93 km long water pipeline (MoEFCC 2019). The reason for the revision appears to be not local land protests but rather environmental activist litigation over the proposed water supply (National Green Tribunal 2019). According to news reports, construction of the power plant began in late 2019 (Pal 2019). At the time of writing, the power plant is still officially under construction (Adani Power Ltd. 2019) with a power purchase agreement in place for the sale of electricity to Bangladesh once it is completed in 2022 (ETEnergy-world 2020). Meanwhile villagers who have lost land continue to seek support from the political opposition within the state, and to file cases in various courts in search of justice (Choudhury 2019; Dasgupta and Law 2020). As the land is in possession of Adani and plant construction continues, the return of land to villagers is increasingly unlikely, and even increased monetary compensation would be difficult to secure at this late stage.

#### ***Vignette 4: heat – pilfering coal to make bricks in the forested hinterland***

In this fourth and final vignette, we examine a range of actors who are able to find cracks in the official coal extraction system to make bricks. Hundreds of small brickmaking units around Jharkhand coalfields depend on the ability to pilfer coal from disused mines or unguarded loading points, and move it on bicycles along backroads into nearby forests where informal brick kilns operate.<sup>17</sup> Once manufactured, and unlike coal, bricks are not transport-restricted, and can thus be easily moved to nearby cities for use in construction.<sup>18</sup> As part of the informal brickmaking industry, (usually adivasi) cycle wallahs and (usually low-caste dalit) brick-making workers are able to find informal coal jobs so that they can carry on with their lives. Relying on coal for a livelihood, in spite of all its vagaries, is the only certainty they have in the midst of the many unpredictable, and often violent, clamp-downs and law-and-order impositions by various official and unofficial authorities in and around the coalfields. It is, however, clear that the informal coal livelihoods offer little more than a minimal existence carrying out demanding and often dangerous work.

In the earlier vignettes, we saw that the formal coal sector provides only limited opportunities for those lacking the right professional degrees and political influence to secure a permanent position. And while some people are drawn to violent gangs or revolutionary groups (see e.g. Shah 2019), most around the coalfields are simply trying to get by in the informal sector as best as they can. Driving the informal coal supply sector is a lack of household energy alternatives and the need for cooking fuel for hotels and restaurants, but also various cottage industries. All of these coal users are forced to seek informal coal supplies since they are locked out of the legal market which serves power plants and large industries. Above all, however, the informal market is simply cheaper; cheaper in the direct sales price, but also cheaper because of the reduced number of bureaucratic control points, and the bribes and taxes paid.

Our respondents estimate that there may be 100 or more brick-making units located along forest gravel roads around a single coalfield in Jharkhand. The units are small and usually built overground as mud kilns that can be dismantled easily, rather than more permanent, underground kilns, in case of disputes with the land owner. In addition, the source of coal changes frequently over time depending on which mine or loading point becomes available. The brick kiln operators were, however, clear in their responses that no coal is ever bought from the open (i.e. legal) market. The possibility to access informal coal is in this sense part of a general lack of regulation in the coalfield area which enables the brick-making units along with many other smaller industries. Water, soil, and coal are all easily available in the forests and fields next to the mines, and the transportation of coal is minimised. One brick-making operator estimated that the coalfield bricks cost one-third to manufacture compared to making them in peri-urban locations within the state.

Local people, who are typically *adivasi*, own the land and can lease it to others for relatively good compensation compared to what agriculture fetches. The brick kiln owners, on the other hand, are

typically Hindu *Rajput* or *Bhumiya* caste landlords, and the workers are *dalit* migrants from Bihar, or local landless workers unable to secure other jobs. Around 30–40 sacks of coal at Rs. 250–300 per sack are required to bake one batch of bricks. One kiln requires about 10 coal-cycle *wallahs* supplying coal regularly. On unsealed roads, one cycle can usually carry about 100 kg of coal twice a day to a particular brick kiln. If a kiln is located further away from the nearest coal source only one trip per day is feasible. Families with an additional male member can, however, help push the second coal sack on the cycle to ensure a larger delivery per trip.

Each brick unit provides work for about 25 kiln workers from six families. These are almost always migrants, even though many local informants admitted to themselves frequently migrating to other destinations across central-eastern India for seasonal brick kiln work. Brick kiln work provides an alternative for families unable to support themselves, for example, during the dry season, but was rarely cited among locals as a serious livelihood option other than in times of real crisis. During non-agricultural periods, or to fulfil a large order, entire families relocate to the huts in the forested hinterland for a few weeks, or up to 4–5 months. Men and women often migrate together to specific kilns, and may return year after year for a daily wage of about Rs 150–200, with women and children receiving a little less. The men prepare the soil and the furnace, while the women carry the bricks, and the children provide water to people who are thirsty.

One village of coal-cycle *wallahs* provided insights into the varied misfortunes that forced them to make a living from coal pilfering and transport to brick kilns. Decades earlier people had settled in the village to work for the then operational cement factory and its nearby limestone quarry. Once the cement factory closed down, the main work available was as manual loaders for the coal trains. However, this work was also impermanent since Central Coalfields Limited (CCL), the state-owned regional mining subsidiary of Coal India Ltd., from the 1970s onwards, began to mechanise coal loading. Mechanisation proceeded slowly with frequent infrastructural breakdowns, but manual loading finally ended in the main railway sidings in the early 2000s. Different *bandhs* (protests) were organised by the jobless with support from labour unions and political opposition parties, and many media reports covered the struggles. Over time, however, the former coal loaders lost support and could neither regain their previous jobs, nor find alternative work. It became universally accepted – by parties, unions, NGOs, and the media – that the hard labour of lifting coal was best left to machines. The previous coal loaders, however, found no support for alternative jobs. As one previous coal loader said: “I think this [manual loading] work was better than to die of hunger”.

Today, for most men in the village, coal-cycle work is the main job. The former coal loader stated that “[w]e usually avoid the nearby sections or railways, as the Government Railway Police exploits people most. If they catch us, they usually take money, but sometimes they take custody of our belongings and beat us”. Since 2017, the *Koyala Kamgar Samiti* (Coal Workers’ Committee) works as a people’s union in support of displaced and jobless coalfield groups. The *Samiti* helps the coal cycle *wallahs* negotiate coal deliveries, including rates per coal sack, and has also managed to get its members included in the Below Poverty List, to allow access to lower cost food. In these tenable ways the informal work as a coal pilfer and cycle *wallah* has come to be somewhat organised and reliable in support of informal coal livelihoods.

### **Analysis: multiplicities at the coal face**

In the four vignettes above we show how coalfield actors take on a number of different roles in relation to coal. These roles, in turn, shape the many forms of politics which surround the coalfield. Two vignettes, no. 2 on weight and no. 3 on pollution, speak particularly to the effects of macropolitics in the coalfields as increased securitisation and national bureaucratic processes are enforced from above. Meanwhile two vignettes, no. 1 on land use and no. 4 on heat, indicate possibilities for people at the margins to reimagine resource rights and uses. Across our vignettes we see how national energy priorities rearrange landscapes and lifeworlds in and around the coalfields on a massive scale. Open pit mining technologies create vast black holes and large waste

heaps which reduce available spaces for other land-based livelihoods. In addition, the ever larger amounts of coal shifted out of the area require larger roads and new railway connections that similarly use up a lot of land. Relatedly, but usually not as easy to see on the ground, are the mandatory compensatory forest plantations that threaten further dispossession in and around the coalfields. We also see officially sanctioned violence against people protesting at the environmental public hearings (in vignette 3), and vast undercurrents of violence running through especially our coal mafia vignette (vignette 2) where the power of guns allow money to be extorted from coal transport. And yet it is clear that violent force alone does not ensure dominance over resources as often uneasy alliances are struck between people with guns and others with the ability to influence the bureaucracy or organise mass protests.

In spite of the violence and structural inequities imbued in present approaches to national energy governance we find that impoverished groups of people in the coalfield continue to find ways to reassert their livelihoods and to stake claims to resources. In vignette 1 dispossessed adivasis reaffirm their indigenous identity but with somewhat renewed focus on spiritual beliefs. Such claims represent a continuity to earlier land rights demands, but are rephrased to find support from dominant state and national government actors more convinced of India's Hindu spiritual origins than the constitutional support for multiple faiths living side by side. And in vignette 4 we find unemployed dalits and adivasis making a claim for a right to livelihood from nominally illegal coal when other means of making a living have been denied. Informal work may appear to be a livelihood of last resort, but this would be to overlook the enormous importance of this sector which allows the vast majority of coalfield people to find ways to make a living on the side-lines of large-scale plans and, often armed, dominant actors.

As especially vignette 3 on pollution sadly indicates, affected people are not allowed to make themselves heard in national extractive planning processes in spite of decades of struggle at project sites, and via strong movements able to connect with national and international centres of power (see e.g. Kumar 2014). What is clear, however, is that the informal economy of coal scavengers and coal cycles in vignette 4 are not merely local, coalfield phenomena but spread far across regions and federal states to power cottage industries and provide millions of people with household cooking energy (see e.g. Lahiri-Dutt and Williams (2005) and Chanchani and Oskarsson (2021)). Relatedly, but impossible to fully account for due to its undercover nature, is the role of coal extortion in funding democratic elections (at least at state-level) as well as insurgency groups (see e.g. Shah (2006) and Joseph (2021)). Micropolitical actors, including the poorest, in these ways continue to produce local political responses able to create far-reaching, alternative resource projects to the officially sanctioned ones "from above".

### **Conclusion: the micropolitics of coal in and beyond the coalfield**

In the micropolitics of coal, we show how actors are not well defined, and additionally take on new roles over time in highly fluid settings: Today's coal-cycle wallah might be a member of the coal mafia tomorrow. And coal mafia members, if able to accumulate capital, might want to invest in machinery to become private contractors able to work long-term in the mines. Meanwhile long-term contractors may use their money and local influence to become elected politicians, or at the very least influence electoral politics behind the scenes. In the micropolitics of coal any one person's life will be crosscut by many, if not all, of these forms of politics at the same time as lives intersect with this key resource.

In the multiplicities we find at the coal face, a micropolitics perspective allows us to see improved possibilities for agency among those often perceived in the literature as powerless. A displaced person may thus, for example, join a struggle group to claim proper compensation as commonly detailed in the political ecology literature (or as in vignette 2 for a feast involving chicken pulav). While attempting to assert legally enshrined rights to land this displaced person simultaneously, however, needs to consider how to feed the family. This generates a need to confront a range of uncertain work possibilities from agricultural or forest-based livelihoods if any land remains within

reach, to joining the informal coal economy, or perhaps even a coal mafia or Maoist rebel group. Important to note here is that none of these options are necessarily mutually exclusive to simultaneously pursuing some of the other possibilities.<sup>19</sup>

Multiplicities at the coalface in these ways not only allow us to see overlapping forms of resource politics, but provide at least a certain amount of individual and group agency in relation to the key resource coal. This is not to deny the enormous inequalities and injustices, not to mention unsustainability, which are generated by the present approach to coal extraction and its governance. Nevertheless, this opens up at least some potential routes out of the present predicament for people usually labelled as the dispossessed, the poor, or the indigenous, and understood as powerless victims in much of the present research on extractivism and just transitions.

Seen through the material prism of micropolitics, we can in these ways begin to understand what new forms of social movement, collective action or everyday forms of resistance might take shape in poor and often violent resource enclaves. We may also become alert to at least some tenable routes ahead toward a post-coal future able to take account of the many varied needs and interests that exist among coalfield actors who at present depend on, and are affected by, coal extraction. In order to find tenable ways toward a just transition away from coal in Global South settings characterised by informality there is a need to grapple with fluid micropolitics where marginalised groups are much more than passive recipients of land compensation packages or rural work programmes.

## Notes

1. See Lahiri-Dutt (2014) on the role of coal extraction in central-eastern India. Shah (2019) provides an in-depth account of Maoist groups in the same region.
2. The immediate land use for coal mines, transport infrastructure, and power plants is enormous and measures hundreds of thousands of hectares combined (Oskarsson, Lahiri-Dutt, and Wennström 2019).
3. The national and regional control possibilities from the extraction, transport, and use of informal coal represent enormous opportunities for key decision-makers and their many collaborators, what Joseph (2021) terms “a feast of vultures”. Evidence of this is the Supreme Court Coal Scam corruption case which cancelled 200 coal mine leases in 2014 (Supreme Court of India 2014).
4. See, for example, Ghosh (2016) and Guttikunda and Jawahar (2014) for the various effects coal has on the environmental quality of coal towns in central India.
5. See Lahiri-Dutt and Williams (2005) for an in-depth account of the coal cycles of Jharkhand.
6. We understand the vignette to be a “brief story that gives the reader a sense of being there” (Saldana 2011: 125).
7. See Nightingale (2018) for a wider argument on the study of the environment via a sacionature perspective.
8. Sarna is a naturalistic religion of adivasis in Jharkhand based on the worship of sacred groves, forests, rivers and mountains. A long-running movement is attempting to get Sarna recognised as an official religion to allow adivasis to register as having a different religion than Hinduism or Christianity (Borde 2017).
9. Similar intrusions by foresters and miners over centuries have shaped the history of the region characterized by local rebellions against outside resource appropriations (Bates and Shah 2017; Dasgupta 2014).
10. The interview was conducted in Hindi and translated by the authors.
11. Self-styled refers to independent activists, but also a perception that the activist will join electoral politics if sufficient popularity can be gained.
12. See, for example, the movie *Gangs of Wasseyapur*.
13. This conversation, conducted in Hindi, has been translated by the authors.
14. Santosh Singh is the name used here for the leader of one of several Rajput (*chatriya*/warrior caste) gangs that operate in this region.
15. *Ganjhu* is a tribal community. The discussion here refers to someone from that community.
16. Different local Maoist groups controlled different aspects of coal transport at the time with frequent fighting between the TPC (Tritiya Prastuti Committee), JLT (Jharkhand Liberation Tigers) and the CPI (Maoist) (see Oskarsson 2017).
17. Official government licenses and other government approvals are not obtained for these kilns, thus they are informal. Similarly to the previous section on money extraction, kilns operating in the forests are controlled and guarded by Naxal forces for a share in the profits.
18. The transport of bricks is not unregulated but requires the use of a relatively simple *challan* (form) compared to much stricter paperwork for coal transportation.
19. Shah (2019) makes a similar point about the surprisingly flexible possibilities for people to join and then leave outlawed Maoist groups that operate in Jharkhand state.

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## ORCID

Patrik Oskarsson  <http://orcid.org/0000-0003-1504-4295>

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