

COUNTERING THE COAL CURSE THROUGH COMMUNITY RIGHTS: STOPPING COAL-EXTRACTION THROUGH FOREST RIGHTS IN SINGRAULI, CENTRAL INDIA

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In April 2020, the walls of a fly ash dam of a coal fired power plant in central India's Singrauli region collapsed, spilling toxic sludge into villages and farms, killing six people, and contaminating water reservoirs. Operational since 2013, Reliance Power's 3960-megawatt Sasan Ultra Mega Power Project (UMPP) is one of the world's largest integrated power projects. Reliance Power is part of the Reliance Group, one of India's largest business houses. While the corporation had ignored notices from the state Pollution Control Board on the fly ash pond and continued to discharge slurry beyond permitted limits, the district administration had ignored citizens' appeals to enforce proper guidelines for building and maintaining ash dams. The state and corporation were also slow and unforthcoming with post-disaster restorations (Dutta 2020).

Such events present an everyday story of corruption and violations by the state-corporate nexus in India's largest industrial zone. Covering 2,200 square kilometres, the Singrauli region is shared between the states of Uttar Pradesh and Madhya Pradesh. It generates 10% of India's electricity and is hailed as the energy capital. It contains eleven operational coal-fired power plants and associated coalmines including some of the oldest state-owned plants and mines. Although the place now appears overcome by an energy juggernaut, just two generations ago peasants and Indigenous Adivasis in the region were leading forest and subsistence farming based

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lives. Singrauli's 200 kilometres long stretch of open coalfields remained untapped till the late 1960s when the construction of the massive Rihand Reservoir ensured water supplies for the coal and power sectors (Chakravartty 2018).

Pollution from four decades of intensive mining and burning of coal beginning from the 1980s has had a telling effect on this landscape: livelihoods and health have been damaged through destruction of soil, water and air quality (Dokuzovic 2012). Singrauli also stands out amongst displacement-affected Indian landscapes from dams and coalmines, both in terms of the intensity and frequency of land acquisition. Adivasis have borne the biggest burden, comprising nearly half the number of displaced people in the region (Sharma and Singh 2009). Further, while Singrauli supplies electricity to sixteen states, 50% of its own population lives below the poverty line and without electricity (Singh 2015).

This article draws on the case of the environmental destruction and social collapse in Singrauli for powering India's coal economy, and a rights-based community resistance to the coal-extractive economy in the region, to address a significant socio-political area that the macro-economic perspectives of the resource curse theory first espoused by Richard Auty (1990) do not adequately address. The primary focus of the resource curse theory has been on the experience of resource-rich developing countries where resource extraction and exports have been found to generate underdevelopment in the long term (Oskarsson and Ottosen 2010). The resource curse thesis has been criticised for not considering the close relation between political institutions and economic factors (Mehlum *et al.* 2005) or the unequal and unjust relationship between powerful state agencies and corporations and the communities living in mineral-rich areas (Lahiri-Dutt 2006). We address these criticisms through a reflection on the state of disempowerment of Adivasis in Singrauli. Conversely, through the case of the resistance to the Mahan coalmine in Singrauli by forest-dependent communities in collaboration with Greenpeace India activists, we argue that where communities have been able to assert their capacity to refuse consent for mining on their lands and pursue a legal right over natural resources (forests in this case), outcomes have proven to be different from the historic process of ecological and social disruption.

In the second section of the article, we profile the political economy of coal extraction since the beginning of India's privatised economic development from the 1990s and its effects on the ecology and society of

Singrauli. The region emerged as the centerpiece of India's increased coal production to fuel a high rate of economic growth since economic liberalisation. Drawing on this, the third section of the article conceptualises a framework to investigate Singrauli's coal curse based on institutional and political cultures of mineral governance and ongoing conflicts between Adivasis and the state over their *Jal, Jangal, Jameen* (water, forests, land). The fourth section then discusses the arc of coal-development and coal governance in India that has driven coal's ecological and social curses. The fifth section discusses the grassroots resistance to coalmining in Singrauli's Mahan forests through the assertion of community rights under the Forest Rights Act. These sections contextualise the minerals curse within the Indian democratic system through a discussion of the political health of institutions and resource governance.

The concluding section addresses how India's coal curse can be reversed, through strengthening democratic governance and legal empowerment of communities, and how the renewables industry can avoid the persistent problems of the coal complex. The article's key findings strengthen the case for a stronger focus in resource curse literature on empowering communities in resource rich tracts in developing countries. Apart from policy documents and news articles, this article draws on fieldwork from doctoral research between 2017 and 2019 and long-term environmental campaign participation in Singrauli by the authors.

Background – The making of *Singrauli, the Coal Curse*

Economic liberalisation since the 1990s led to a drastic increase in India's coal-based power generation. Singrauli became the driver for this model of development¹ and experienced a flood of capital for coalmines and power plants (Singh 2015). From 2005, India's largest private energy companies, including Essar and Reliance, entered Singrauli. Despite being designated as a critically polluted industrial zone, a moratorium on new mines and power plants in Singrauli was lifted to facilitate the grand design of coal and electricity production under India's 12th Five Year Plan for

¹ The region was expected to supply an additional 35,000MW of electricity to the central grid by 2017. This was part of the grand ambition of India's 12th 5 Year Plan (2012-2017) to add an unprecedented 100,000MW of electricity generation capacity to India's central grid.

economic development (2012-2017) that aimed for a high growth rate of 8% of GDP per annum. Almost all the new coalmines were allocated in the region's remaining forests, risking further loss of animal habitats and forest livelihoods. From the 1960s to 2011 Singrauli had already lost one-third of its forest cover (Pillai *et al.* 2011).

Although coalmines and power plants were approved with the purported aim of powering the nation, the state and capitalist nexus in Singrauli has also driven an agenda of environmental and social collapse. Reliance Power's Sasan power plant, for instance, was commissioned despite Singrauli being designated a critically polluted area, compounding the historic disregard for the region's environment (Vyawahare 2018). The state-corporate agenda of neglect manifests through repeated accidents: the April 2019 fly ash breach was one of three such events within a 12 month period.² India's energy capital has been rebranded as India's *Coal Curse* on account of the indiscriminate destruction of its environments and livelihoods through planning and operations singularly focussed on maximising coal extraction. The coal-developmental mindset has encouraged corruption, unaccountability and non-compliance amongst mine and plant operators and inadequate governance in the administration (Pillai *et al.* 2011).

Resource abundance cannot be considered the only dominant factor behind Singrauli's minerals curse. Institutions, policies and governance have combined with economic factors in deeming Singrauli a sacrifice zone. A state-corporate nexus in mineral extraction operating at various levels from the national through to the local has disenfranchised communities in central India's mineral rich tracts. There are deeper social and historical dimensions to the neglectful attitude of political and business elites towards central India than just its mineral richness. Present day discontents over coalmining in Singrauli, and mining in central India more broadly, have deeper roots in colonial land and forest laws, and mindsets that regarded Adivasis as stumbling blocks to resource extraction. People's discontents have been exacerbated owing to a continuation of the colonial mindset through postcolonial institutions, policies and practices.

² The other breaches occurred from the slurry dams of Essar Energy's 1200-megawatt Mahan power plant and the state-owned NTPC 4760-megawatt Vindhyachal Super Thermal Power Plant.

Home to large Adivasi populations, forested central India has served as a site of conflict since the British colonial era, between the rights and sovereignty of Adivasis over *Jal, Jangal, Jameen*, and extractive state capitalism. Colonial laws that vested control of Adivasi forests in the hands of the state and sanctioned the arbitrary takeover of Adivasi lands were met with revolts that forced the colonial government to pass countervailing legislation.³ Colonial land and forest laws were overhauled only after six decades of independence. Paradoxically, although postcolonial Indian governments took over Adivasi lands and forests for minerals and energy in the same vein as their colonial counterpart, this was deemed to be in the national interest for developing a sovereign country (Ramesh and Khan 2015).

The colonial-extractivist mindset persisted amongst political and business elites even after the passing of the *Forest Rights Act 2006* (FRA) which sought to redress historical injustices towards forest-dependent peoples. The twin motivation of state administrations in central India to not give up control over forests and to facilitate mining for revenues is evident through the poor implementation of the FRA, violation of its provisions for community consent for mining, and even overturning previously granted forest rights (Chowdhury and Aga 2020). The question of how mining drives Adivasi disenfranchisement and deepens central India's mineral curse needs to be considered within the wider context of historical and present struggles for rights and protections over *Jal, Jangal, Jameen*. The question of countering the resource curse needs to pay attention to the scope for strengthening community rights in central India.

Criticisms of resource curse literature

The resource curse thesis emerged in the aftermath of the 1960s global economic boom. Its main focus has been on the experience of resource-rich developing countries (Oskarsson and Ottosen 2010), and on the

³ The British colonial government's Land Acquisition Act 1892 (LAA) continued unchanged for nearly a century till 1984. It vested arbitrary powers in the state for land acquisitions, using a justification of public purpose. The colonial era Forest Act passed in 1878 restricted the access of forest-dependent communities to forest commons and produce under the guise of scientific forestry. The Santhal Parganas Tenancy Act 1949 and Chotanagpur Tenancy Act 1908 were passed after long struggles and restricted mortgages and prohibited the transfer or purchase of Adivasi lands by non-Adivasis.

‘paradox of plenty’ wherein, empirically, being rich in minerals is associated with being poor in material wealth (Mehlum *et al.* 2005). The phenomenon is found to also afflict industrialised countries where it can be understood through the ‘Dutch disease’. This term was coined to describe the 1960s experience in the Netherland after it prioritised the export of newly discovered natural gas, resulting in a rise in exchange rates and affecting the prosperity of other export sectors like manufacturing (Auty and Warhurst 1993). Essentially, conceptualisations across both industrialising and industrialised economies have recognised similar maleffects from the preponderance of resource-extractivism: economic distortion, corruption, inequality, a negation of democracy to environmental destruction.

Resource curse literatures have largely assumed mineral wealth to be state owned (Luong and Weinthal 2006) and national mineral political economies to be export-oriented and therefore strongly influenced by global resource prices (Stevens and Dietsche 2007). The literature has brought empirical evidence of economic, political, social and ecological impacts in minerals rich countries (Auty 1990; Gelb 1988; Gylfason *et al.* 1999; Sachs and Warner 1997, 2001) and more recently of the impact of entrenched coalmining interests on climate change (Goodman and Worth 2008). The disproportionate impacts of resource extraction on vulnerable groups dependent on nature-based livelihoods has emerged as a central challenge in the literature (Martinez-Alier 2002; McCarthy 2002; Schlosberg 2007). With regards to Indigenous peoples, the resource curse reflects ‘the long arc of violent extractivist frontiers and resource colonialism that was responsible for their historic dispossession’ (Parson and Ray 2016).

The theory has been critiqued for its implicit economic determinism. Studies exploring and quantifying the relationship between economic growth, resource abundance and institutional capacity have argued that assessments about the impacts of mineral extraction need to consider the close relationships between economic factors and political institutions (Mehlum *et al.* 2005, 2006; Sarmidi *et al.* 2012). India’s coal economy was developed for domestic industrialisation and power generation and was facilitated by policies to keep the price of energy low (Gopal 2016). In this India deviates from the standard model of resource-exports oriented economies in the resource curse literature.

This makes it imperative to examine India's coal curse through a focus on coal governance. There are two main issues. The first is the legislative complex of coal, land, forests and community rights management, and of coal-development undercutting land, forest and community rights through a combination of 'national interest' exceptions and state actions to dilute or violate legal clauses for rights and consent. The second is persistent corruption, as seen through the 'Coalgate' coalmine allocation scandal between 2004 and 2012, one of the largest government scandals in the country (Amnesty International 2016).

Kuntala Lahiri-Dutt has summarised the problem as a failure to address the domestic impacts of extractivism. In 'A critique of 'resource curse' and conflict theories' (2006) Lahiri-Dutt criticises the lack of empathy in popular macro-economic theories which do not address unequal and unjust control of mineral resources by corporations and states and the drain of wealth from communities (apart from the destruction of their livelihoods) through mining. It argues for a rethinking of mineral governance in developing countries through a critical focus on ameliorating policy frameworks and reallocating decision-making powers on minerals to communities in resource rich tracts. Although this paper does not focus on the specific question of community rights over mineral resources, it picks up crucial elements from Lahiri-Dutt's critique to focus on the historic and present conflict around forest rights in central India.

Although they make up only 8% of India's 1.2 billion population, Adivasis have constituted 40% of the 60 million displaced by large development projects since independence, demonstrating industrialisation's disproportionate burden on them (Kohli *et al.* 2018). One in every six of 87,000 Indians displaced by the state-owned Coal India Limited mines between 1976-2016 is Adivasi (Amnesty International 2016). Adivasis have lived on their lands for generations without possessing formal land titles. Further, India's legal framework does not fully recognise Adivasi rights to free prior and informed consent over matters of extraction and development on their lands. During the coal boom following economic liberalisation in the 1990s, even fertile agricultural lands (apart from forests) were taken over without consent and often under duress and through state-sanctioned violence (Amnesty International 2016). This paper turns to the pressing question of enforcing community rights over forests and consent for extractive development on Adivasi lands, against the political reality of mineral extraction in central India.

Coal in India: King and a curse

Coal is India's most abundant fuel and has served as the resource backbone for post-independence development since the 1950s. Indian coal is thermal coal with a low calorific value used for electricity generation. As a developing economy with a large poor population, India linked coal production for electricity to the moral imperative of poverty alleviation, since electricity use is strongly linked to development in the Human Development Index (Ghosh 2016).⁴

Electricity needs during the first four decades since independence were met through domestic coal produced from India's coal reserves. During this time India built a 'national coal economy' through a legal framework that gave coal eminence while undercutting protection for Adivasi lands under the Constitution. National policies and public companies aimed to provide power for rapid economic growth (Gopal 2016). Coalmining was brought completely under the purview of the public sector through the *Coal Mines Nationalisation Act 1973*, making coal synonymous with the national interest (Lahiri-Dutt 2016).

The state monopoly over coal and electricity began to ease from the early 1990s with the initiation of structural reforms to liberalise the economy and allow private capital and Foreign Direct Investments (FDIs) in the energy sector. From 2004 the Indian government allocated 194 coalmines either directly to private companies or to state enterprises, which in turn contracted private operators. Private corporations were allowed to mine coal for their power plants and to sell electricity. They stood to profit due to the constantly rising demand for electricity, producing the phenomenon of 'neoliberal coal' (Lahiri-Dutt 2016). Finally, from 2015 private and foreign corporations were permitted to commercially mine coal. Meanwhile, rapid growth increased energy and minerals needs, making India the world's second largest importer of coal.

Despite these changes, the majority of India's coal production is still controlled by the state-owned Coal India Limited (CIL), the world's single largest coal producer. Most of India's coal-fired electricity is also state controlled through the public power utility NTPC Ltd. Coal supplied 75% of the electricity and accounted for 56% of the primary energy consumed

⁴An estimated 240 million Indians still live without electricity (International Energy Agency (IEA) 2015).

in India in 2018-2019 (Central Electricity Authority 2018). It is still seen as critical for industrialisation, lifting millions out of poverty, and meeting India's sustainable development goals.⁵ Coalmining directly employs half a million Indians and nearly the same number indirectly. Although not a major contributor to the national economy, the sector plays a significant role in the regional economies of major coal-producing states. Beyond formal employment in the sector, the livelihoods of peasants and Adivasis displaced by coalmining and not employed in the new coal economy are dependent on artisanal coalmining or subsistence coal gathering (in lieu of collecting forest produce), creating many worlds and informal economies of coal (Lahiri-Dutt 2016: 204). The coalmining sector is also intricately tied to the economy of the Indian Railways, the world's largest rail network that transports the bulk of the domestic coal.

India is now the world's third largest electricity generator and consequently the third highest emitter of greenhouse gases (GHG) due to a primary dependence on coal. Long-term and concentrated coalmining and power generation has created harmful effects: soil and water degradation, displacement of Adivasi and peasant communities and disruption of their livelihoods through pollution and deforestation. Major coal-producing regions are also some of the most economically backward and least economically diversified parts of India. Such regions are doubly vulnerable to coal, both to the impacts of its mining and burning and to a dependency on it for revenues, employment for a section of the local workforce and by local elites.

As an industrialising nation, India continues to argue for its right to grow based on coal, while urging developed nations to take bigger steps towards reducing emissions. India's Paris commitments did not indicate when coal usage will peak, but set ambitious targets for renewable energy development. Renewable energy developments and coal production have grown in a mutually independent manner since the 2000s, indicating no clear policy pathways for a transition away from coal. A move by the Indian government to auction 50 new coal blocks in 2020 further undermines efforts to transition away from coal (Roy and Schaffartzik 2021). It also serves as a reminder of the approach that India has maintained in global climate politics, that coal is expected to dominate

⁵ India has adopted the United Nation's 2030 Agenda for Sustainable Development that aims to end poverty in all forms; the Agenda contains the provision of affordable, reliable, sustainable and modern energy for all as one of its main goals.

India's energy mix into the foreseeable future (Planning Commission 2015). However despite government rhetoric and actions, the energy sector has responded to the global decline in coal demand and profitability; India's coal producers are diversifying their energy sources, ramping up renewable energy production, and setting net zero emissions targets. This shift and a declining coal demand in India was reflected in the results of the Indian government's coalmine auctions in 2020 where over 70% of the designated coalmines failed to secure any bids from private companies (Varadhan 2021).

On the one hand, this arc of post-Independence development demonstrates a material and ideological dependency on coal; on the other, it demonstrates its deleterious eco-social effects. In this respect, coal is both King and a Curse. Coal being deemed as King has served to deepen its curse, especially under exacerbating climate change, as India continues to expand coalmining despite declining demand, and fails to end its primary reliance on coal despite significant increases in renewable energy generation. The following subsections discuss the outstanding issues of legal conflict and inefficacy and corruption in the governance of coal; they analyse the political culture that permeates executive and legal oversight of mineral extraction, turning India's coal abundance into its coal curse.

Legal regimes and the coal curse

Coal mining became the chief agent of disruption for forest-dependent communities in central India in the post-Independence era (Lahiri-Dutt 2016). An Amnesty International report on Indigenous rights has argued that a mosaic of laws with vastly different mandates has created a legal conundrum leaving critical gaps in safeguarding Adivasi land rights in the face of coalmining (Amnesty International 2016).

For example, while the Indian Constitution acknowledges historical marginalisation of Adivasi people and safeguards Adivasi lands through geographically demarcated tribal majority Scheduled Areas⁶, many of which are in central India, the *Coal Bearing Areas (Acquisition and*

⁶ Article 244 of the Constitution enshrines special safeguards for Adivasi land rights through geographically demarcated tribal majority Scheduled Areas where separate legal and administrative frameworks apply. The Fifth Schedule of the Constitution maps out tribal majority areas across nine states, six of which are in central India.

Development) Act 1957 (CBAA) gives coal greater priority over other forms of land use, including over the land rights of Adivasis in the designated Scheduled Areas, to allow ‘greater public control over the coal mining industry and its development’ (CBAA 1957: 1). Together, the CBAA and the (now repealed) *Land Acquisition Act 1894* (LAA) vested ultimate power in the state to acquire any land for coalmining (Lahiri-Dutt 2016).

Rights based legislations have also either been poorly implemented or violated. The Indian government passed democratic reforms such as the *Forest Rights Act 2006* (FRA) and the *Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013* (LARR) to overhaul land acquisition and give people a say about how the state should deal with their lands and forests⁷ (Ramesh and Khan 2015). The FRA holds the potential to substantially alter living conditions of forest-dependent communities, but this potential has been undermined in two significant ways. First, state governments eager for mining revenues have misused the provision for community consent for mining on Adivasi lands under the FRA, to the extent of forging consent for mining (Chowdhury 2016). And second, a slow and flawed implementation of the FRA and high rates of rejections of community forest rights claims (as high as 50% in central India) has meant that a mere 3% of the total potential for community forest rights (excluding India’s north-eastern region) has been realised in 10 years of the FRA (CFR-LA 2016). A state government even went to the extent of removing already granted community forest rights to facilitate private mining, setting a dangerous precedent for Scheduled Areas around India (Sethi 2016).

Mining of coal and other minerals rose by 75% between 1994 and 2009, requiring a growing proportion of land to be acquired and forests to be cleared (Shrivastava and Kothari 2012). India’s coalmine lease area and coal production capacity roughly doubled between 2007 and 2011. Virtually all new coalmines and most planned power plants were located in central India, and a significant proportion in forests. Coalmining was granted the highest share of environmental and forest clearances.

⁷ The LARR made it mandatory to seek approvals from affected communities through the clauses of consent and social impact assessment (SIA), as well as to resettle and rehabilitate title-holders and livelihood losers. It set compensation formulas at four times the value of rural and twice that of urban land, and also contained provisions related to return of unused lands and food security (Kohli *et al.* 2018).

Alongside a high GDP growth rate of 7-8% since mid-2000s, the Indian government diluted the FRA and LARR for ease of business, dealing a blow to legal democracy (Nayar 2016). With states acquiring an increasing proportion of land for private mining in central India, including in designated Scheduled areas; there was a ‘ground-clearing’ of Adivasis in this period (Bharadwaj 2018).

The Congress Party and its United Progressive Alliance (UPA) government (2004-2014) which passed these reforms already began diluting them, especially the provisions for public consultation for mining. Narendra Modi’s Bharatiya Janata Party (BJP) and their National Democratic Alliance (NDA) government (2014 onwards) took even more drastic steps in diluting democratic provisions, social impact assessments and environmental protections under these laws (Amnesty International 2016). These state practices in the neoliberal era of India’s post-independence development entrenched the resource curse in central India.

Corruption in coal governance

Coalmining has been synonymous with corruption in the public consciousness. Even the nationalisation of coalmines since 1976 did not remove corruption in coal governance, nor prevent the flouting of environmental laws and safety standards by mine operators (Thakurta 2013). Neoliberal reforms since the 1990s specifically reoriented the state’s behaviour in favour of private resource extraction and made the state a land broker for private mining (Levien 2011). Neoliberalism added another dimension to corruption in coal governance by transforming the state-business nexus, which now became characterised by a narrow alliance of business and political elites. As Thakurta argues, it created the phenomenon of ‘crony capitalism’, causing undue favours to be extended to corporations, and the neglect of the public interest (Thakurta 2015).

A 2012 report by India’s Comptroller and Auditor General (CAG) revealed that from 2004 the Indian government had allocated coal blocks without any transparent assessment of financial capacity or technology and without following a process of competitive bidding (CAG 2012). In many cases coalmines with much higher production capacities than what was required to be supplied to power stations were approved. Corporations profited from the flawed allocation process; they acquired coal cheaply from allocated coalmines and then diverted them to power plants that were

selling at market rates; companies also acquired coalmines as speculative assets without any actual intention of mining. The CAG report estimated the loss of revenue to government, and consequent gain to private companies, at over A\$200 billion (Mehdudia 2012).⁸ This corruption under the United Progressive Alliance (UPA) government came to be known as ‘Coalgate’. It revealed the extent of the corporate-political nexus and corruption within the highest levels of government, with the state giving land and coal to corporations for free (Inamdar 2013).

Based on the CAG investigation, in 2014, India’s Supreme Court ordered the cancellation of 214 coal blocks that had been ‘illegally’ and ‘arbitrarily’ allocated to private corporations (Rajagopal 2014). The Supreme Court judgement provided an opportunity to reform legislation and prosecute violators (Nileena 2018). Against the backdrop of its predecessor’s ‘Coalgate’ scam, the Modi government promised to better manage India’s coal sector. The Mahan coalmine in a forested part of Singrauli that sparked a local anti-coalmining movement from 2011 (discussed in section 3) was part of ‘Coalgate’. The Modi government cancelled Mahan (amongst other coalmines) following the Supreme Court’s directive, but it failed to deliver on the bigger promise of reforming coal governance (Kohli and Menon 2020).⁹

The Mahan coalmine also found itself at the centre of an interrelated conflict of interest within the UPA government regarding coalmine allocations in forests. In 2006, the Ministry of Coal allocated the Mahan coalmine to a private corporation formed as a joint venture between the

⁸ The CAG Report named twenty-five companies including some of India’s largest power and resources corporations – Essar Power, Hindalco, Tata Steel and Power, Adani Group, Lanco, Vedanta group, Arcelor Mittal, Jindal Steel and Power – as beneficiaries in the private allocation process.

⁹ The *Coal Mines (Special Provisions) Act 2015* mandated auctions for coalmines offered to private companies; it retained the government’s power to allot coalmines without auction to state enterprises but banned the latter from new joint ventures with private firms for new coalmines (while allowing the loophole of bringing private firms as contractors or subcontractors). Based on the new rules, the Modi government auctioned the first set of coalmines to private companies in 2015. The auctions were characterised by aggressive biddings with the amount and royalty payable to six mineral-rich states has been estimated to be to the tune of Rs. 1 lakh crore (A\$20 billion) over the next 30 years. But the risks involved in this new approach need to be understood in light of its consequences on Adivasi and forest-dwelling communities: although the system of auction in the 2015 Act appears transparent, it essentially means that money will determine everything, and other social determinants including the consent of landowners, will become dispensable.

power giant Essar and the aluminium manufacturer Hindalco to supply their new power plants in the region¹⁰ (Fernandes 2012). Unlike the developed northern parts of the Singrauli coalfields where forest cover had been destroyed, the Mahan coalmine lay in the relatively undeveloped southern coalfields, which contain one of Asia's oldest contiguous Sal tree forests. The Mahan forest supports the livelihoods of 50,000 people across 54 villages, serves as a tiger habitat and elephant corridor and is a catchment of two major rivers that feed the Rihand Reservoir (Padel 2016).

The Ministry of Environment and Forests (MoEF) and Ministry of Coal (MoC) had established a joint criterion to designate which forest zones across central India's coalfields were inviolate on account of their outstanding biodiversity. This 'go-no-go' exercise was part of a government agenda to avoid clearance delays for coalmining while keeping environmental interests in mind (Kohli *et al.* 2012). The initial exercise identified 396 coalmines as 'go' areas for coalmining and 206, including Mahan and six other Singrauli coalmines, as 'no-go'.

But the coal ministry stepped back from the process upon seeing the extent of coalmines rendered inviolate. Following interventions from the Prime Minister's Office, and objections from the coal, power and steel ministries, the environment ministry moved 70 no-go coal blocks to the go list, including Mahan (Down To Earth 2015). With Essar's thermal power plant in advanced stages of development, its executive exerted pressure for a 'fait accompli' forest clearance for Mahan, creating the situation for the Environment Ministry to push 'done deals' for approvals. The MOEF even recommended an alternative coalfield for Essar in the neighbouring district where 70% of the coal blocks were in the 'go' list (Ramesh and Khan 2015).

A high-level committee steered by India's Finance Minister granted a first-stage forest clearance for Mahan in 2011 disregarding the MOEF's disapproval. The extent of Essar's influence in the clearance was exposed through a series of leaked emails (Kaushik 2015). The Modi Government later cancelled the coalmine following the Supreme Court order against it, on the grounds that it was located in 'inviolate' forests. But it contradicted its own action by simultaneously approving an adjoining coalmine in the Mahan forests. Yet again the Indian government had failed to apply a

¹⁰ Mahan was expected to produce 8.5 million tonnes of coal per year through a 1000 hectares open cut coalmine over a lifetime of only 14 years.

common rationale in making decisions critical for the environment and communities (Pillai 2017). Despite this, the story of halting the mine at Mahan offers many insights into the process of overcoming India's coal curse.

Coalmining versus forest rights in the Mahan forests

At a time when the first forest clearance was contentiously granted for Mahan, a collaboration between the Indian arm of the international environmental group Greenpeace and grassroots mobilisation at Mahan came together to resist the approval and to demand community forest rights (CFRs) under the *Forest Rights Act* (Pillai 2017).

Legal empowerment

As a part of Greenpeace's international climate campaign focussed on 'keeping coal in the ground' to stop climate change, Greenpeace India had been strategically campaigning against a massive build up of new coalmines in central Indian forests since 2004 (Fernandes 2012). Bearing in mind the context of social conflict in central India over mining without Adivasi consent, Greenpeace's anti-coal climate campaign also sought to work with local communities to raise their awareness about forest rights and the right to have a say over mining activities on their lands (Talukdar 2019). A survey of the community by Greenpeace showed that the forests were indispensable for the locals, but they were unaware of their rights under the *Forest Rights Act* (Kohli *et al.* 2012).

Eleven villages fringing the Mahan forests first faced prospects of displacement in 2007 when the state government acquired land for Essar's thermal power plant. Although Essar purported to offer generous rehabilitation and resettlement packages, affected people alleged procedural irregularities and broken promises over compensation (Sharma and Singh 2009). An alliance eventually formed between the globally oriented Greenpeace activists and the local forest community. A Mahan Sangharsh Samiti (MSS) (Mahan Resistance Front) was formally formed in 2012. The MSS logo consisted of a ring of dancing people around a circle of peacock feathers, with a mahua tree at the centre. The mahua tree symbolises people's custodianship of the forest. Mahan villagers resolved to fight the coalmine when local government and company agents forged

villagers' signatures on a referendum on coalmining in 2013. People were especially motivated to fight the state's corrupt behaviour when they learnt they had legal rights over their local forests through the *Forest Rights Act*.

Legal violations

Under the FRA the state government was required to conduct village council meetings across the 54 potentially impacted villages around Mahan, to determine whether the community consented to mining, before forest clearance could be granted. But in reality administration and company agents disrupted village meetings. The police intimidated movement members from organising village council meetings and arrested local movement members and Greenpeace activists on false allegations (Talukdar 2017). As with several other peoples' movements in India, women put themselves at the forefront at Mahan and faced significant abuse. Forest officials and company agents harassed women when they stopped trees from being marked and felled in the forest. The local legislative assembly member threatened MSS women with rape; the police refused to investigate their complaints and sometimes even planted false cases (Pillai 2019).

Company-hired agents physically disrupted council proceedings in Amelia, Mahan's largest village, to prevent people from registering their community forest rights under the FRA. The corrupt practices extended beyond the forging of signatures of one village council in Amelia to determine consent for mining, to the state government completely avoiding the community consent process in the other 53 villages (Greenpeace India 2014). The state government was asked to conduct fresh council meetings to determine people's consent after Greenpeace and MSS took the matter to the tribal affairs ministry in the central government. The central government ministry expressed concerns at violations to the FRA both in Mahan and more widely in central India (Sethi 2015). However, in a new twist, a new Environment Minister in the Indian government who was known to have strong links with Essar, directly undermined the tribal affairs ministry by issuing a final forest clearance in February 2014, on the basis of the fraudulent village council resolution (Press Trust of India 2014).

Resistance and assertions

Having become aware of their rights, the Mahan community demanded that forest clearance not be granted till the process of recognising their individual forest rights (IFRs) and community forest rights (CFRs) could be completed, as required under the FRA (Kohli *et al.* 2012). The community persisted with forest blockades for five months in 2014 after the Indian government granted a final clearance based on the fraudulent referendum, and as company contractors began marking trees in the forest for felling. Despite numerous threats, three villages in Mahan had succeeded in organising village council meetings and submitting claims for community forest rights by 2016 (Talukdar 2018).

The victory over the coalmine in 2015 following the Modi government's decision brought a sense of empowerment. At the second anniversary celebrations of their victory in 2017, bright yellow banners with slogans celebrating people's forest rights lined the walls of the function tent in Amelia village. These slogans, such as '*Jan Jan ka naara hai, van adhikar hamara hai*' (a people's chorus for forest rights'), and '*gaon gaon ki yahii pukaar, le ke rahenge van adhikar*' ('village after village will claim forest rights') had motivated them to keep persisting with the forest blockades. The assertion '*Purkho ka naata nahi todenge, jangal zameen nahi chodenge*' ('we will respect our ancestral land, we will not give up our forests') had grown to become an MSS anthem. The largest said '*Loktantra Zindabad*' (Long Live Democracy). This became a slogan for the MSS when they recognised their fight to stop the coalmine was a struggle to democratise India's coal-led development and assert alternative development models for coal-imperilled landscapes such as Singrauli.

Significance and consequences of anti-coal activism

In fighting the coalmine, the Mahan resistance challenged the structural disenfranchisement of Adivasis in coal rich central India both through national-level coal governance and the state administrations' handling of people's livelihood rights. The resistance drew attention to the ecological and social curse of coal in central India. As a successful livelihood and land rights movement from the heart of India's coal region, it symbolised empowerment and historic justice. Although the movement claimed victory for Mahan, they had not won security for the forests, for their rights

and a sustainable future. Paradoxically, although the Modi government de-allocated Mahan, it cracked down on the resistance, and particularly on Greenpeace. Repeated cancellations of Greenpeace's registration to operate in India and freezing of its funds by the Modi government forced the ENGO to close down most of its campaigns and particularly its anti-coal activism in India (Talukdar 2019).

Conclusions

This article has argued that the resource curse is mainly constituted politically, institutionally, and administratively. It thrives in a culture of corruption in mineral extraction where corporations are blatantly favoured at the expense of the public interest, as reflected in land grabs, the violation of rights-based legislation, mining without Indigenous consent and often through violent repression of communities. With a transition away from fossil fuel towards renewable energy already under way, resource curse literature needs to examine what might constitute as resource curse in the clean energy sector.

Corrupt coalmine allocations under neoliberal policy are systemic indicators of the coal curse in India. They benefit private players and their political allies, violate or dilute of legislations that address the social and environmental effects of coalmining, neglect safety and environmental norms in thermal power generation, and regard Adivasis and forest-dependent communities as stumbling blocks to coal-development. Their wider repercussions for resource governance and democracy are writ large across landscapes like Singrauli. In Singrauli, toxic and acidic fly ash has turned some water bodies into what locals called 'death water' capable of corroding the flesh; companies have largely disregarded the pleas of locals to build bridges across the toxic waters (Dokuzovic 2012). Governments and institutions have largely ignored pleas from pollution action networks to address the coal ash problem in Singrauli and other central Indian coalfields (Sapor and Raheja 2021).

Economic withdrawal from coal alone is unlikely to resolve Singrauli's critical environmental problems due to disregard for sustainability. The mismanagement of waste from coal extraction – mining overburden, coal burning and fly ash can remain a problem long after coalmines and power plants stop operating. There is an urgent need for political and institutional action to address the many dimensions of the coal curse in Singrauli

around human health, critical pollution and environmental destruction caused by thermal plant and coalmine operators.

However, as seen in Mahan, when communities become aware and claim their forest rights, and demand a say over coalmining on their lands, a sustainable vision separate from coal juggernauts is possible. Awareness, mobilisation and assertion of forest rights can break a historic pattern of injustice and conflict in central India, and prevent the state from dictating decisions over resources on the lands of Adivasi people (Kohli *et al.* 2012). Claiming community forest rights (CFRs) under the FRA can bring a sense of ownership over forest commons that communities did not know before, and help underpin sustainable livelihoods.

The need to build a future based on the forest economy became a central topic of discussion in the years following the Mahan struggle. These conversations in turn have reflected an aspiration for decolonising development in central Indian landscapes by affirming local and alternative development practices and priorities. The *Forest Rights Act* and other legal mechanisms for community participation and decision-making in minerals development offer a potential basis for this and need to be strengthened, protected, and effectively implemented.

Finally, a transition from coal to renewables in India's political economy in response to the climate crisis should aim to address the fundamental political and institutional mistakes of the coal complex. Renewable energy projects have already caused similar human rights problems to coalmining, particularly land dispossession, livelihood disruption, and the inability of local communities to access the electricity generated from the project (Roy and Schaffartzik 2021). Strengthening democratic governance and grassroots capacity to exercise civil rights and forest rights will be critical to ensuring environmental and energy justice for affected communities.

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