

## A Fine Balance? Value-relations, Post-capitalism and Forest Conservation – A Case from India

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### Abstract

The serious need for anti-capitalist theory and action in a crisis-ridden world is widely acknowledged. Recent scholarship in conservation abides by this understanding, and finer deliberation on the links between radical theory and ongoing practices have grown but are still marginal. In this article, we study a case of community forest governance in Korchi, Maharashtra in India, where 87 village institutions and their federation have been striving to govern and manage surrounding forests in ecologically-sustainable and democratically-collective ways. Using Marx's labour theory of value and metabolic rift concept, in combination with Ariel Salleh's notion of metabolic value, we explore how Korchi's attempt at eco-sufficiency is premised upon a fine balance between different values its villagers associate with their forests. This requires us to see Korchi's villagers as meta-industrial labourers, a term Salleh uses for workers whose labouring practices—marked by care and reciprocity—typically lie on the margins of capitalism. Using the (analytical) lens of value relations, we show how such practices towards forests help sustain a healthy metabolic relation between humans and nature, not dominated by exchange value concerns. We thus offer conceptual nuance on how post-capitalist theory can better support the real-world practice of alternatives to mainstream conservation.

**Keywords:** metabolic rift, metabolic value, conservation alternatives, community forest governance, Indian Adivasi worldviews, post-capitalism

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### INTRODUCTION

As ecological emergencies of the 'Anthropocene' epoch intensify, many demand a revaluation and re-articulation of our relationship to non-human nature<sup>1</sup>. The radical literature on conservation has made it clear that nature is not separate from us and nor is it just a source of exchange-value (Longo

et al. 2015; Dawson 2016; Büscher and Fletcher 2020; Córdova 2021). While fortress conservation is premised on separating humans from nature, newer neoliberal approaches to conservation advocate monetisation and financialisation of nature (Castree 2010). Empirically and ontologically, critical scholars reject these views that have guided mainstream thinking in conservation. More recently, this vibrant critique of mainstream conservation has transitioned into literature promoting eco-socialism, radical transformations and conviviality as theoretical tools to (re-)conceptualise human-nature relations (Temper et al. 2018; Büscher and Fletcher 2020; Fraser 2021). While this is an encouraging scholarly turn, further deliberation is needed to understand how these non-capitalist conceptualisations of human-nature relationships resonate with existing practices that seem to

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show radical potential for ensuring ecological security and justice<sup>2</sup>.

In this article, we attempt to bridge empirical practice with theory using Marx's concept of metabolic rift and the labour theory of value. We ask what types of value relations underpin radical community forest relations, and how do these emerge? Our query speaks to scholarship in political ecology and political-economy of nature that has laid new emphasis on the usefulness of metabolic rift in both understanding current ecological crises and in transcending them (see Longo et al. 2015; Foster and Clark 2020). While Marx already showed that the narrow focus on 'value' (i.e., exchange-value) in capitalism creates degrading conditions for humans and nature, scholars have recently studied how diverse understandings of value in/of nature can pave the way for post-capitalist transformations (Salleh 2010 introduces the metabolic value concept; Büscher and Fletcher 2020: 144–145 and 174–176 discuss the notion of value embedded in multiple natures; and more generally Kenney-Lazar and Kay 2017 call for an increased engagement with the (Marxist) concept of value in nature-society research).

Alongside these conceptual contributions, there is scholarship that relies on existing praxis when decoding the meaning of such post/anticapitalist transformations (Singh 2017; Mehta et al. 2021). For Mehta et al. (2021: 111), whose research is set in India and Bangladesh, transformation may be "conceptualised from 'below' in marginal environments", and they "suggest that 'local' (patches) and the idea of transformation as praxis are critical conceptual templates to help map and explain how systemic transformative changes can be assembled and effected on the ground through a range of interactions between social actors, socio-economic and political processes and co-produced knowledges". Our attempt to delineate post-capitalist conservation is inspired by such practice-based engagements, even as our analysis of value relations could be viewed as a predominantly theoretical exploration.

The Marxian distinction between use-value and exchange-value is still essential for understanding and transcending capitalist logic (Marx 1976: 163–176, 199–220; Foster and Clark 2020: 219–20). However, to better illuminate how certain communities, such as the one in our case study, are reinvigorating their relationships with forests, we demonstrate the usefulness of Salleh's (2010) metabolic value concept. It captures the reciprocal and regenerative capacities of human-nature interactions. It also symbolises the essence of 'care for nature' embodied in the worldviews of many indigenous and forest-dwelling communities that, we argue, falls outside of a strict use/exchange value dichotomy. Metabolic value connotes the integrity of ecological systems, including humans (Salleh 2009: 24, 306; 2010). Our empirical material comes from Korchi taluka<sup>3</sup>—a collection of villages within India's Gadchiroli district. Here, since 2012, 87 local village assemblies (*gram sabhas*) are attempting to collectively govern and manage their forests in directly-democratic and ecologically-sustainable ways. While we cannot claim that conservation practices in Korchi are anticapitalist, they do display some features that research suggests are vital to alternative (-to-capitalist) forms

of environmental governance. This makes Korchi a fertile ground to illuminate what metabolic value is and its potential role in repairing the metabolic rift.

The next section elaborates upon these theoretical concepts, showing how they better explicate (and critically expose) mainstream conservation. That is followed by a description of Korchi taluka and the methods we used to study the processes unfolding there. In the remainder of the research article, we discuss the findings that emerged from studying Korchi's forest governance history and from examining the everyday interactions villagers have with their forests. We describe how villagers straddle different values to sustain a healthy social metabolism and discuss what this could mean for radical approaches to conservation.

## METABOLIC RIFT, METABOLIC-VALUE AND (RADICAL TAKES ON) CONSERVATION

### The value-form and metabolic rift

While the exchange of useful goods predates capitalist production, for Marx (and Marxists) capitalist commodity exchange has an inherent tendency to create unsustainable metabolic relations between humans and nature. This—as Saito (2017: 106) explains—is because "the labour carried out by individuals is organised as a private act" wherein "there is no conscious agreement on the general production among producers because they simply follow price changes in the market" (Saito 2017: 109; see also Burkett 2014; Huber 2017). The quantitative exchange-value (money) abstracts from the qualitative use-value of goods in a way that enables large-scale exchange (Marx 1976: 129). For Marx (1976: 152–165), the quantity of abstract labour i.e., socially necessary labour-time objectified in a commodity determines its exchange-value (price), which is the form in which 'value' appears on the market (Burkett 2014: 80–81). Capitalism thus "bring[s] new social characteristics into the transhistorical metabolic interaction between humans and nature" (Saito 2017: 109).

Capitalism initiated an unprecedented separation of labourers from their conditions of existence, making it, in effect, impossible for them to meet their basic needs without first selling their labour power as a commodity (Burkett 2014: 64–65). Below, we note how a similar separation underpinned early fortress forms of conservation but for now, the point of import is this: Capitalism is organised around generating an ever-increasing amount of exchange-value i.e., the "valorisation of value" (Marx 1976: 252–254) without considering the adverse conditions this creates for human labour and nature (Foster 2013; Saito 2017: 99–113). The insatiable drive for 'monetary' value in capitalist production intensifies commodification of all needs (creating new needs and desires as well), progressively alienating humans from their labours and nature (Burkett 2014: 81; Foster and Clark 2020: 41–43; Dunlap and Sullivan 2020). This leads to a metabolic rift—essentially a disruption in the regenerative processes of human and natural labours due to their unsustainable exploitation under capitalism

(Foster and Clark 2020). Marx defined it as an “irreparable rift in the interdependent process of social metabolism, a metabolism prescribed by the natural laws of life itself” (Marx in Foster 2013: 5). Obviously, humans transform nature—this is social metabolism—but they must do so in conformity with natural cycles if the universal metabolism of nature is to be maintained (Foster 2013; Saito 2017: 247–248).

Marx initially used the metabolic rift (following Liebig’s work on English agriculture) to explain how industrial capitalism disrupted regenerative processes such as soil fertility. Recently, scholars have used it to explain modern environmental problems such as global warming (Clark and York 2005) and the crisis in fisheries (Longo et al. 2015). If environmental degradation is understood in this way, addressing it demands an approach different to the one mainstream conservation promotes. Critical scholars (Dawson 2016; Büscher and Fletcher 2020; Foster 2022) highlight how mainstream conservation serves to reinforce metabolic rift given its intertwinement with capitalist logics—a point covered next.

### Capitalism, conservation, and radical alternatives

Modern conservation began by separating (some) humans from nature and it was premised on the same dualism that underpins capitalism. Witnessing the gross destruction of wildlife in many tropical colonies<sup>4</sup>—that were transformed into ‘game’ or commodities—under the European colonial enterprise, former imperialist hunter-naturalists decided to impose barricades (create fortresses) around these habitats as a way of averting extinction (Ross 2017: 243–245). The creation of such protected areas (PAs) then (and today) economically benefited certain groups over others. Kelly (2011) argues that PAs are a type of ongoing primitive accumulation where the commons are enclosed and producers—typically indigenes—separated from lands sustaining them. Local knowledges and governance systems are furthermore disregarded in these accumulative processes.

Strict separations, however, became increasingly untenable as colonies gained independence and so commenced the era of (certain top-down forms of) community-based conservation that chimed well with the sustainable development agenda of the 1980s: if conservation profits are distributed with locals, conservation could become a tool for (capitalistic) development instead of being oppositional to it (Adams and Hutton 2007; Dressler et al. 2010). Locals could now participate in conservation—even earn wages from it—although value and control tended to be unevenly distributed favouring governments and international agencies (Kashwan 2013). Furthermore, this logic of profiteering from wildlife contrasts the more culturally and spiritually rooted understandings of nature that many indigenes and local communities have held (Sullivan 2009; Simpson 2017): understandings that stem from the knowledge that humans and nature are essentially interconnected, an ethos that eco-Marxists can reckon with (Saito 2017; Foster and Clark 2020).

With the rise of neoliberalism, there has been a push to commoditise hitherto unpriced natures as a way to solve environmental problems (Costanza et al. 2014; Foster 2022). The fundamental logic here is that we can allegedly “save” nature by making its exchange-value ‘visible’ and tradable on the market (McAfee 1999). This involves a process of abstraction that pulls nature out of its specific context, packages it into substitutable ecosystem services and carbon commodities in a way that spurs injustices (Lohmann 2014). While well intended at times, critical scholars highlight that such schemes lead to new rounds of accumulations, hyper-commodification, intensified alienation; not tackling the root causes of the metabolic rift (Dunlap and Sullivan 2020; Foster 2022).

A radical alternative to conservation must instead seek to heal the rift. In being guided by an attitude of reciprocity, guardianship and in recognising the interconnectedness of all life, alternatives must reshape humanity’s relationship to nature and counter alienation (Simpson 2017; Sullivan 2017; Azcona et al. 2020; Córdova 2021). They require a reintegration of the economy within nature as opposed to further monetising nature (Longo et al. 2015: 179–182; Sullivan 2017). This in itself demands rethinking what a ‘good life’ means. In line with this, Brand et al.’s (2021: 265) recent article proposes expanding the notion of planetary boundaries to involve “societal boundaries or collectively defined thresholds that societies establish as self-limitations”. Others demand that communities be provided legislative support and autonomy to govern regional resources in what can become locally managed economies (Gibson-Graham 2006: 127–163; Kothari 2014). Finally, scholars such as Dawson (2016: 89–91) argue for a redressal of environmental injustices and for conservation reparations (see also Tauli-Corpuz et al. 2020; Kashwan et al. 2021).

### Metabolic value and eco-sufficient production

A common conceptual thread running through this radical literature is to replace capitalism’s emphasis on generating exchange value from nature with a multidimensional understanding of the value produced by and with nature. What might such a value be called? Are the classic political-economy categories of use and exchange value sufficient, especially if the aim is to theorise labours expended through nature at the margins or outside of capitalism? While many Marxist scholars increasingly agree that along with the workers, it is also small peasants, indigenes, autonomous communes and mothers who are leading anticapitalist transformations in the now<sup>5</sup>, contestation still exists over how to account for and theorise around the value(s) these labours produce (see e.g., Foster and Clark 2020: 219–237). Considering both these debates in relation to the insights gained from Korchi, we find Ariel Salleh (2009, 2010)’s conceptualisation of ‘metabolic value’ better suited to recognising and theorising such values and labours.

Comprehending the need for an expansive theorisation of labour and value that can “integrate women’s, peasant, indigenous, and ecological politics”, Salleh (2009: 1–14,

297-304 and 2010: 206) proposes the category of metabolic value that she says is concerned with protecting the ecological integrity of ecosystems, of which humans are a necessary part. Metabolic value captures the regenerative and reproductive capacities of humans and nature that flourish independently and in relationships to each other. It “appears to be relational, immanent, and emergent in the material and energetic integrity of living processes—in nature and in human bodies as nature” (210). It is a value “sustained and enhanced” by the meta-industrial labor “supporting ecological integrity and the social metabolism” (212) and is generated in production processes that are in compliance with the metabolic capacities of ecosystems. Salleh (2010) also illustrates how metabolic value is distinct from use-value, a point we want to extend further in our analysis. As an example, she points out how women’s reproductive labour that creates new life (i.e., metabolic value) cannot be reduced to the use-value generating labour they otherwise do at home when providing for families.

Salleh (2009: 300) draws upon an ‘embodied materialist’ epistemology that is based on the everyday experiences of “negotiating humanity-nature relations” where both productivity and reproductivity are accounted for. The goal of meta-industrials (in contrast to monetary profit) is eco-sufficiency, which is the meeting of needs agreed upon communally without the creation of ecological debt (unpaid gifts from nature) and/or embodied debt (unpaid reproductive work, Salleh 2009: 5–6). We can witness this in the ways forest-dwelling communities continue to satisfy their food, shelter and non-material needs by listening to and knowing how surrounding natures function over time, over place. It requires an ethic of reciprocity and restraint that is often culturally incorporated and collectively practised in settings where communities have “autonomy and resource sovereignty” (Salleh 2009: 8). This reminds us of Brand et al.’s (2021) notion of ‘self-limitation’ that comes from collectively negotiated ‘societal boundaries’. These are then some of the background conditions<sup>6</sup> in which metabolic value and eco-sufficient production emerges, as also evident in Korchi. The metabolic value generating practices of meta-industrial labour are in this way “rift-healing” (Salleh 2010: 205–206) with the potential to resist and transcend capitalist relations.

In sum, we can understand use-values as being circumscribed by human needs-fulfilment, exchange-value as being circumscribed by the need for exchange (capitalist or otherwise), and metabolic value as being circumscribed by the need for flourishing ecosystems. If capitalism creates crises because of the relentless prioritisation of exchange-value, a more sustainable, post-capitalist system would strive for other value configurations—an analytical point we explore in this study.

## STUDY CONTEXT AND METHODS

### Korchi taluka

Korchi taluka is a sub-district of 133 villages located in the Gadchiroli district of Maharashtra, an administrative region

covering parts of western and central India. Gadchiroli has an area of 14,412 sq. km and most of its land is under forests (~76%)<sup>7</sup>, with a substantial Adivasi<sup>8</sup> population (38.71%) compared to other parts of India (GoM 2022). Korchi’s population is ~42,811; 73% of which are Adivasi and a majority of them belong to the Gond tribe (Government of India Census 2011). Most livelihood and nutrition needs are met from small-scale agriculture, raising cattle and from collecting and selling non-timber forest produce (NTFPs) e.g., Bamboo, Tendu (*Diospyros melanoxylon*) leaf, Mahua (*Madhuca indica*) flowers, Jamun (*Syzygium cumini*)<sup>9</sup>, honey, wild fruits and tubers from the dry deciduous forests of Korchi (Pathak Broome et al. 2022).

### Methods

We used qualitative methods and empirical data comes from two sources: 1) a long-standing and wide-ranging engagement co-author Neema Pathak Broome (NPB) has had with villages in Gadchiroli and in Korchi; and 2) six in-depth interviews conducted by co-author Annie James (AJ) in April and May 2022. We<sup>10</sup> have lived and worked for several years in Maharashtra, where Gadchiroli lies. This gives us a fair understanding of the region’s culture and language of which Korchi’s villagers share certain aspects.

NPB first began engaging with villagers and community organisations in the Gadchiroli region in the 1990s. This long-term association stems from her being a core-member of a 40-year-old Indian non-profit organisation called Kalpavriksh Environmental Action Group, that works on community-conservation and alternative livelihoods. Between 2017 and 2019, she specifically interacted with Korchi villagers as a participating member of the ‘Academic-Activist Co-generation of Knowledge on Environmental Justice (ACKnowl-EJ)’ project—a global initiative documenting examples of environmental justice. The Korchi study was a collaborative effort involving Korchi’s community leaders, its villagers and two Indian non-profit organisations (one of which was Kalpavriksh). NPB stayed in Korchi’s villages for ~60 days, spread over six visits between January 2017 and April 2019. When not in Korchi, interactions continued over the phone and online. The experience was both anthropological i.e., studying and co-developing governance processes with Korchi’s people and ethnographic i.e., an observation of villagers, their lives and livelihoods (Ingold 2017). She was part of and participated (on request) in village-assemblies and community meetings wherein different community governance processes were designed and discussed, including on forest rights and governance. She also participated in the annual festivals between 2017 and 2019 that are celebratory gatherings of all 133 villages in Korchi and when *yatras* (pilgrimages through forests and villages) are carried out.

This is the broad empirical experience that our article draws upon. Additionally, to investigate the theoretical and empirical aspects of specific concern here, AJ conducted six in-depth interviews. The first interview (April 2022) was a reflexive style



interview of NPB that helped create a shared understanding among the authors of the article's key concepts as they relate to Korchi. On the basis of that, five key-informants were purposively sampled who could offer an internal and external perspective on relevant processes in Korchi. Respondent 1 is a member of a local non-profit organisation (NGO) and has been directly involved in creating awareness around forest rights in Korchi's villages since 2014 (interviewed in April 2022). Respondent 2 and Respondent 3 are Korchi Adivasi villagers who, since the mid-1990s, have been engaged in community-mobilisation and awareness-raising on topics such as forest rights, self-governance, anti-mining resistance etc. (interviewed in May 2022). Lastly, AJ interviewed two academic researchers who have had multi-year engagements with Korchi villagers investigating processes around NTFP collection, sale and associated forest management strategies (Respondent 4 and 5, interviewed in May and April 2022 respectively).

All interviews were conducted online using video calls with each lasting ~1.5 hours. The style was collaborative and conversational (Creswell 2013: 173) to enable an expansive understanding of how communities relate to their forests. All interviews were transcribed and, where necessary, translated from Hindi. Transcripts were reviewed, sections marked and then coded both inductively and deductively in an iterative manner to arrive at the key themes of this article (22 codes). Quotes presented below were shortlisted from many that could substantiate the article's main arguments.

## BACKGROUND CONDITIONS: ANALYSING KORCHI'S FOREST GOVERNANCE LANDSCAPE

### State control of forests and social-movements in Gadchiroli

Like most Adivasis, Korchi's villagers have historically been culturally, socially and economically dependent on forests. The takeover of Indian forests first by the British colonial government, starting with the Indian Forest Act (1865), and later by the independent Indian state ruptured such dependencies (Kashwan 2013). Many Adivasis—including Gond tribes spread across central India—resisted these disruptions (Bijoy 2008; Pathak Broome et al. 2022). India's Forest Department was established in the colonial period where scientific forestry management systems governed forest uses and meanings. Forests were primarily viewed as a commercial source of timber and were worked successively with that objective in mind. This process can be understood as a form of 'rift creation' where older forests were replaced to serve demands of the capitalist colonial enterprise (Gadgil and Guha 2013: 99–108). Customary practices were discouraged as was local use, which alienated locals from their forests. Recognising, however, the needs that Adivasis in Gadchiroli region had, the Government of India set up a committee in the 1950s to record their customary forest rights. These were detailed in what are locally called as *Nistar Patra* (record of usufruct rights) but over time these

were lost to bureaucratic (mis)translation. By the 1980s, many villagers considered the state as the true owner of the forests, with locals' rights and use being curtailed. State control over forests and associated livelihoods was in this way consolidated (Pathak Broome 2018).

This consolidation, however, has not been uncontested. Since the 1970s, Gadchiroli has witnessed a range of social-movements that emerged partly to oppose mega-development projects e.g., dams, mines, and partly to resist the systemic oppression and dispossession of Adivasis. One such movement was the *Jungle Bachao, Manav Bachao Andolan* (Save Forests, Save Humanity Movement). It spread across central India in the 1980s to oppose the proposed creation of dams. The movement had a huge influence in Gadchiroli and resonated with existing struggles for resource rights and against commercial forestry (Pathak Broome 2018). It critically questioned an understanding of 'development' that destroys nature and displaces people; the dam project was later shelved. Another influential movement has been the Naxalite (or Maoist) struggle against the Indian State, that at times results in violent conflict. 'Naxalism' emerged in the 1960s in Eastern India as a peasant uprising against landlords and was inspired by communist philosophy, especially of Mao (Shah 2011: 162–65). Its broad (stated) aim was challenging land usurpation, state-mandated national resource extraction from Adivasi regions and instead advocated for self-rule of these areas. Gadchiroli is considered part of India's red corridor—a large area India classifies as "plagued by Naxalites"—and has consequently witnessed militarisation (GoM 2022). As a final mention on movements, Gadchiroli has also been influenced by Gandhian philosophy promoted by activists focusing on the ideas of *swaraj* (self-rule) and *ahimsa* (non-violence, Pathak Broome 2018).

Although this is a surface coverage of complex movements and philosophies, we hope it provides readers a sense of how Adivasis in Gadchiroli and Korchi have been exposed to multiple ideologies. At times, this ideology clashes with the state's version of 'modern development' that tends to view nature as a resource to profit from (Bijoy 2008). However, we hasten to add that the ideological core for many in Korchi tends to be their Gond worldview, which is predicated upon a deep interdependence between humans and nature through which material and non-material (e.g., cultural, spiritual) needs are met. This worldview influences everyday life-activity in Korchi and, together with some of the influences mentioned above, could be linked to the generation of metabolic value in forest-community relations.

### Legislations supporting community forest-governance

One outcome of grassroots resistances by Adivasis and other forest-dwelling communities—that coalesced into a national movement in the early 2000s—was the 'Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act' or the Forest Rights Act (FRA) passed by the Indian Parliament in 2006 (Kashwan 2013). The FRA is

India's attempt to repair historic injustices done to forest-dwelling communities since colonial times even as its 2006 enactment was vigorously opposed by certain groups e.g., pro-forest conservationists and the environment ministry (i.e., Ministry of Environment, Forests and Climate Change), the latter oversees India's forest bureaucracy (Bijoy 2008). The Forest Rights Act recognises multiple rights e.g., access, use, management and governance of customary forests that can be held individually and collectively as a village. It includes rights to collect and sell NTFPs for livelihood needs. Gadchiroli has one of the highest rates of claims acceptances in India even as implementation across the country is poor (CFR-LA 2016). As of December 2018, 87 villages in Korchi had collective forest governance and management rights to ~14,500 ha of forests, which is ~20% of Korchi's geographical area (Pathak Broome et al. 2022). Another vital legislation that has bolstered self-governance in Adivasi areas is the Panchayats (Extension to Scheduled Areas) Act 1996 (PESA). It was brought in to affirm the history of traditional self-governance systems amongst Adivasis and enables village Panchayats to govern aspects such as customary resources, NTFPs, minor minerals and local institutions. In 2014, the Government of Maharashtra notified rules under PESA that specifically allows villages in its region e.g., Korchi to own and sell NTFPs without the Forest Department's interference (Sahu 2020).

The above legislations have had decisive impacts on village and forest governance in Korchi, two of which are: (1) a strengthening of *gram sabhas* (village assemblies) that are now legally each village's main decision-making unit; (2) creation of a federation of 87 village *gram sabhas* called the Korchi Maha Gram-Sabha (MGS henceforth) in 2017; its objective is to oversee the implementation of these two Acts to ensure sustainable NTFP harvest and trade, forest rehabilitation, strong village self-governance and equitable benefit-sharing across and within villages. Joining the MGS federation requires villages to pass a formal resolution to the effect. Each village pays an annual membership fee and nominates two women and two men as representatives to the federation's monthly meetings. This general body selects from among themselves an executive body that includes 50% women, representation from all castes, classes, and those differently-abled. The executive body governs the day-to-day functioning for a period of three years and is supported by an advisory body of community elders. Smaller-scale meetings of 7-10 villages also occur facilitating more intimate interactions, while village-level assemblies including women and children are also regularly held (Pathak Broome et al. 2020).

### ANALYSING COMMUNITY FOREST VALUE-RELATIONS

These historical, sociopolitical and legislative nuances are central to the subsequent analysis of forest-community relationships. Korchi, we emphasise, is not a homogeneous group and perceptions on matters of concern here would vary across residents. Our insights come from the responses we

received in our interactions with people from Korchi, especially community thought leaders, and from other interviewees who have worked there in different capacities (see Methods).

#### Use-value

People in Korchi continue to depend hugely on the forest for their basic needs and livelihoods. This is witnessed in the kinds of houses they construct, in the food they eat, in pastures their cattle graze upon, in the tools (e.g., brooms, farming equipment) and the medicines they use. Respondent 3 (villager) says,

The jungle is such a place that we have to go there every day—for leaves, for wood, for our brooms, for tubers and roots, for uncultivated food, for seeds—for everything, for things we need to make for farming...so this is a very close relationship we have with the forest, even more so than with our farmlands.

The forest has several items of local use-value and these items are mediated by cultural practices and understandings. As an example, Respondent 1 (NGO member) highlights how “they use Bamboo in their functions from birth to death” with Bamboo being used to make a new-born's cradle and to build ceremonial ladders that they carry dead in for last rites.

Moreover, crops may fail some years but forests, being perennial, have the capacity to cater to the community's subsistence needs. “If for example, there is no farm produce, no water and in case crops are not produced one year, then the forest can provide for all our needs,” says Respondent 2 (villager). From such articulations, it was easy to see how villagers are directly dependent on their forests for everyday uses. It is consequently a space where regular and immediate interactions between humans and nature occur, even more than in their farmlands.

#### Exchange-value

The forests in Korchi became commodified once colonial takeover began, with forests becoming commercially valued for timber. Outside of timber, Bamboo and Tendu leaf are commercially valuable forest products (Sahu 2020). However, until recently (i.e., 2017 when the MGS federation organised the first auction for selling Bamboo and Tendu leaves), most villagers were insignificant actors in processes that generated this exchange-value. The Forest Department (FD) organised auctions wherein private contractors were given tenders to harvest NTFPs. Villagers were employed as wage-labourers to collect the produce receiving meagre and unreliable incomes, as Respondent 1 (NGO member) notes,

Communities were engaged in the extraction of NTFPs as only daily wage labourers—they were not owners. FD was the owner, it used to auction the Bamboo and Tendu leaves and the communities were only collectors. They were doing it at a very low wage that was offered by the FD.

The FD received an undisclosed royalty from the private contractors, only a part of which villagers received as ‘bonus’.

There was opacity and discrepancy in the amount of leaves that made it to the FD's record books which further financially disadvantaged villagers (Pathak Broome et al. 2022: 73). While villagers were aware that their forest's produce was being transformed into commodities, it was the FD that controlled production and interfaced with markets. A large portion of the exchange-value generated was thus extracted from those producing it—a feature of capitalist relations with the forest department acting as a de facto capitalist.

Although cash has traditionally been less important, the wages villagers received were a vital source of money needed to purchase goods especially agricultural inputs. The demand for cash has now grown as greater integration with the market-economy occurs: It is in this context the importance of laws such as the Forest Rights Acts and Panchayats Act that give *gram sabhas* the right to collect and sell NTFPs needs to be seen. These rights facilitated (and motivated) 87 villages to collectively create the MGS federation in order to economically benefit from NTFPs and to prevent individual villages from being exploited by large traders (Pathak Broome et al. 2020; Sahu 2020). This shift in ownership from the FD to village *gram sabhas* under the MGS has increased cash-incomes that interviewees cited as substantial. Respondent 3 (villager) emphasises this, “from four forest products (NTFPs) the worth of the produce we get annually is approximately INR 50,000 (~USD 605) per family. And this is only from these four products, rest for food and sustenance we always use things from the forest”. Sahu (2020) corroborates this increase; he reports the prices obtained in Korchi for a standard bag of Tendu leaves under the two governance regimes from 2014–2016 when the FD conducted auctions to 2017–2019 when the MGS conducted auctions. The average price obtained in the MGS auctions was higher by 111% (simple average over a 3-year period under both governance regimes).

Community collectivisation that existed prior to the Forest Rights Act and the creation of the MGS has been bolstered by this economic gain, especially since individual households and the village as a collective benefit. This collectivisation is also a consequence of the ways in which the MGS has functioned as a governance body in contrast to the FD. There are transparent rules and processes around harvesting, price negotiations with traders and equitable funds distribution (including with women). Monthly meetings, where all matters including financial are transparently discussed, ensure that rules are followed and conflicts addressed. Payments go directly and on-time to *gram sabhas*, who then transfer it to households while keeping a certain percentage as village development funds. Elaborate records for these transactions are kept, publicly displayed in all villages and shared with the government officials. Respondent 2 (villager) validates this, “And we keep a full account of how this common pool money is spent. On the first of every month when we have the MGS meeting, we share openly what quantity of funds came that month, how it was spent and on what.” While these mechanisms are not perfect, they have had positive impacts on how villagers view their forests and the exchange-value derived from it. We importantly

note that this new economic appreciation is bounded by the knowledge that exchange-value is now governed collectively and that their forests generate direct use-value and—what we classify below as—metabolic value.

### Metabolic value

For Korchi villagers the forest needs their care and it, in return, cares for them. Respondent 3 (villager) often used the Hindi word “*dekh-rekh*”, which literally translates into ‘looking after’ or ‘care for’, when discussing villagers’ interaction with forests. Caring for the forest seems akin to caring for their families and being in the forest is like being in their “mother’s home” where one can roam freely and reciprocally be cared for, “Like a married woman is closely associated with her mother’s home, so for every Adivasi community the closest association is with the forest...it is for this reason we call it mother’s home”. At another point Respondent 3 (villager) adds “And just like we care and arrange for the health, education of our family members, similarly we have been doing it for the forests considering it as our own and protecting it”.

Villagers acknowledge the forest’s own regenerative capacities which they say is intimately linked to Adivasis’ traditional and place-based knowledges. Respondent 2 (villager) comments,

We see that the trees that were planted here (by outsiders), every year they have to be watered in the dry season. But no trees survived. But such a big jungle—on its own the seeds fall, trees grow and no one needs to water it. Still it is surviving. So, we have some indigenous methods and knowledge as well. We may not be so educated in the traditional sense but at the local level, we know well and that is what is very important.

At another point Respondent 2 wonders, “But we are thinking if the Adivasis are indeed so poor and backward, then how come all these educated people have finished all the forest”.

In likeness to other indigenes (Aiyadurai 2016), Korchi’s Adivasis revere nature. The forest is a space where spirits and ancestors reside. In forest patches considered sacred any use except in emergencies is discouraged. Respondent 5 (researcher) notes, “In every forest area you will see evidence of multiple kinds of spirits occupying different parts of the forest... These spirits come and you go to the spirits, you cannot take certain things from certain areas which are occupied by some spirits.” This notion of sacredness gives rise to practices that, we argue, respect the universal metabolism of nature. The focus and outcome of such practices, as Salleh (2010) emphasises, is ecological integrity and in this instance they stem from an alternative cosmological belief system. Relatedly, when the harvesting season begins, no items are picked before a prayer ceremony occurs thus limiting untimely harvesting. Respondent 2 (villager) shares how elders explain the significance of holding prayer rituals before harvesting, “If we keep eating without following such prayer rituals, then all the baby fruits will also be finished. It will not fully mature.



If that does not happen how will people know and be able to use its seed". Different sub-groups in Korchi have animal and plant totems that they are forbidden from consuming, allowing those species to regenerate. Such labouring acts of care and restraint are regenerative of forests and we contend generate metabolic value. Inverting the concept of embodied energy in commodities (e.g., fuel used to transport products), Salleh (2010: 213–214) argues that when economists ascribe "positive economic value" to embodied energy they confound what is actually an "ecological negative" and extractive of metabolic value. As a contrast, meta-industrials—that we argue Korchi's villagers resemble—are "humans who provision in reciprocity with nature, catalyse its transfers, thereby enhancing the relational power of metabolic value".

This is one of the reasons why villagers vehemently resist mining proposals that are currently under consideration in Korchi's forests. Respondent 5 (researcher) explains, "Most of the time the argument [against mining] is—'if the forest goes, where will our Gods go. We can build a house somewhere else, but what about them who reside there. They cannot go anywhere'". Villagers thus seem to prioritise ecological integrity over extractive development, motivated by alternative spiritual beliefs, their deep connection to land and concern for future generations—a feature common amongst indigenes (Aiyadurai 2016; Simpson 2017). It is further clear in Respondent 3's (villager) comment why ecological integrity is prioritised when s/he says "we are seeing the companies that are in the cities [and] what is prevalent there: polluted air, polluted water, nothing seems to be pure...[Here] the trees move and provide us with pure air. So our bodies are also pure." This pure relation—both material and non-material—referred to by the villager transcends a use-value relation to forests, and we agree with Salleh's contention that the relations and labours of meta-industrials cannot be categorised as solely providing use-value, even if that is one outcome of it.

### A BALANCING ACT?

#### Metabolic value generation as conservation and rift healing

If the metabolic rift is created by a prioritisation of exchange-value, then arguably one way to repair this rift would be to reject such a prioritisation and establish a balance between different values so that the universal metabolism of nature is respected. An inevitable consequence of this would be (more just forms of) conservation. This seems to occur in Korchi where villagers see the forest as a vital source of use-value and metabolic value that emerge relationally. The increased freedom to use the forest since the granting of forest rights has strengthened their ability to actively care for the forest, a sentiment they are not unfamiliar with given their longstanding dependencies on and sacred relations with nature. In contrast to the abstracted social form of exchange-value i.e., money, villagers experience the generation of use-value and metabolic value directly in everyday interactions. Communities are thus

aware of the need of a regenerative forest. It is probably for this reason that economic gains have (so far) not translated into exchange-value domination, typical to capitalist relations (Burkett 2014: 65).

Since changes in Korchi's forest-governance regime (in the early 2010s) no comprehensive ecological study has been conducted which makes it difficult to statistically comment on the impact on forest ecology. However, we can witness conservation in the revival of older systems of taboo and setting up of new forest-patrolling committees to oversee illegal felling, poaching and protection against fires that villagers now take an active role in. This change has been noted by NPB and by Respondent 4 (researcher) who comments,

Earlier [villagers had a] 'it's not our forest' attitude. And not by intention. By default they had to say that because the FD always tried to confiscate their property, livestock, or [was] harassing them or penalising them...but now the ownership is with them...there is [a] drastic change when it comes to forest fire governed under the FRA and forest fire under the [earlier] FD regime...the rate of deforestation has declined drastically in CFR recognised forests<sup>11</sup>. It needs more empirical datasets but whatever oral history [there is] and people are saying is that in comparison to the earlier forest deforestation rate—that has drastically come down even if drastic forest cover increase is not there.

We argue that in the context of India—where conservation often purports to the exclusionary barricading of certain 'protected' areas and where unsustainable extraction of natural resources occurs outside of these barricades—Korchi's forest governance approach can be considered as one way to radically conserve forests and nature. This approach is couched in a clear articulation of development. Development that destroys nature is considered dangerous, and local notions of progress often contest the dominant ideas of material accumulation and growth, as Respondent 3 (villager) poignantly states,

Progress for the outside world is setting-up companies. From the company they are getting lots of money, their children are getting good education, are buying nice mobiles, cars. They live in buildings with air-conditioners, drinking filtered water. For them it is progress but for us this is violent. Now from outside chemical fertilisers, modified seeds and electronic equipment are coming which destroys our labour...We are not having any progress... And if we ever give our land to the company, then our death is certain... because the water will also get polluted... and we will be forced to drink polluted water, breathe polluted air.

In such articulations it becomes possible to see how Korchi Adivasis' worldview could nurture metabolic value and eco-sufficiency and, in doing so, operationalise anti-capitalist transformations.

#### Trade-offs between values and threats to collectivisation

We do not claim that a harmonious and total rejection of exchange-value in favour of other values prevails in Korchi.



There are difficult trade-offs given India's larger (neoliberal) political-economy. We take examples of such trade-offs to emphasise that post-capitalist transitions are fraught with several constraints—a nuance sometimes absent in abstract theory. One example is the tension in managing forest-fire. Fire benefits Tendu leaf production but can harm forest health more generally. Respondent 5 (researcher) explains,

Fire in this region is a very contentious practice where the Forest Department says that fire is bad...whereas fire is required for Tendu production...There is a lot of debate about whether [villagers] should practice it or not. At least within Korchi they have all stopped fire to a great extent; of the 80 I know at least 20-30 villages have prevented, started to prevent fire and they are using alternate practices to trigger the same kind of Tendu production.

Another example is how increases in exchange-value are affecting collective governance. The large forest area means that NTFP quality varies e.g., Tendu leaf sizes differ across villages. Initially the MGS negotiated one rate for leaves procured from all 87 villages. This was to have strength in numbers and avoid internal competition amongst villages. However, over time certain villages have decided to sell their better quality leaves separately at higher prices. Villagers now have stricter boundaries where use of 'outsiders' (members from other villages) is monitored and subject to permission. Additionally, pressure from political elites and extractive agencies, who could benefit financially from NTFP sales if the MGS federation breaks up, creates de-collectivisation. Respondent 3 (villager) rues,

One after another the *gram sabhas* are separating from the Maha Gram Sabha... Either we did not reach out effectively to these villages [that have split] or we could not give them proper guidance... But mainly it these politicians who are playing political games. They try to break collectives wherever they find them.

In wanting to combat this threat Respondent 3 determinedly adds, "But this is our collective, our federation. We do not fight for one person; we fight for 90 villages as one." The struggle to stay collectivised and autonomous is thus an ongoing one for Korchi. So far it seems to be sustained by Adivasi worldviews that go hand-in-hand with the realisation that adopting external notions of progress can destroy local livelihoods, natures and ways of being. The future for Korchi and communities like it is uncertain given increased marketisation—including of nature—but they still constitute interstices where post-capitalist transformations can take root (Wright 2019).

## CONCLUSION

In this article, we tried to demonstrate how a study of different value-relations and their specific configuration in a concrete setting is one way in which the open-ended, but increasingly necessary, concept of (radical) alternatives to mainstream conservation can be delineated. We started by acknowledging that mainstream conservation reinforces the metabolic rift, intensifying separation and commodification

of human-nature relations; one consequence of which is the neoliberal rush to convert nature into quantitative (exchange) values. Next, we proposed that analyses of use-value and exchange-value be supplemented with the category of metabolic value, which captures the regenerative capacities of all natures. This is especially true for the kinds of non-monetised, non-utilitarian relationships that many indigenes are 'still' engaged in when living-with/-in nature (Aiyadurai 2016; Simpson 2017; Sullivan 2017). We find that a healthy social metabolism is sustained in relationships where metabolic value and local use-value are not sidetracked by exchange-value pressures but are in a fine balance that respects the universal metabolism of nature. We showed how Korchi's villagers negotiate between these different value-generating relations, recognising the contribution each makes to their wellbeing. Importantly, the meaning of well-being itself is locally specific, arrived at collectively and tends to be anti-material growth. Finally, we outlined certain contextual conditions specific to Korchi that seem to nurture this balance: 1) resource autonomy; 2) strong communitarian sense that also secures individual needs; 3) clear understanding of the ecological, cultural and livelihood losses that can result from modern (capitalistic) development and the 'power-to' resist such development made possible through progressive legislations and the longstanding support of internal and external agents; 4) capacity to meet most needs locally; and 5) engaging with markets as an association of collective workers<sup>12</sup>. Scholarly work in other socioecological contexts can unveil more ways in which a negotiation between multiple value-relations can help promote a healthy social metabolism. Our study showed how metabolic value can be a useful conceptual tool towards that endeavour and towards the larger goal of better articulating radical practices.

## Author Contribution Statements

Concept or design of the work: AJ and NPB; Data collection: AJ and NPB; Data Analysis: AJ and NPB; Drafting of the manuscript: AJ; Critical revision of the manuscript: AJ and NPB; Final approval of the version to be published: AJ

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## Declaration of competing/conflicting interests

None.

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## Research Ethics Approval

Annie James: Doctoral Project Ethics Approval from UAB Ethics Commission: Comisión de Ética en la Experimentación Animal y Humana (CEEAH). Project Approval No: CEEAH 5886. They are 5 interviewees whose quotes are used in the article. Written Consent forms for three interviewees (who could read and write in English) were taken. The other two interviewees gave verbal consent, which is in the call recording.

Neema Pathak Broome: Most of Neema's anthropological stays—insights from which inform the article—were conducted as part of the ACKnowl-EJ project between 2017 and 2019. ACKnowl-EJ was a collaborative process that included full participation and consent from a section of Korchi villagers, whose views inform this research. Neema's long-term engagement with the Gadchiroli community dates back to 1996: these interactions have been made in her professional capacity of being a member of Kalpavriksh Environmental Action Group, where she serves as a community-conservation researcher, activist and policy advocate.

## Data Availability

All transcripts of the five interviewees are confidential and cannot be shared publicly. The code-based analysis, done in an Excel file, contains quotes from these transcripts and cannot be shared publicly. All these files are stored in a secure online space on Annie James's personal computer. The quotes used within the main article text have been anonymised to protect the identity of all research participants.

## Preprint Archiving

None so far.

## NOTES

- 1 For brevity's sake, henceforth we use 'nature' instead of 'non-human nature' even though the latter term better encapsulates a dialectical-materialist understanding of nature-society relations we subscribe to. Nature and society are neither seen as separate (dualism) nor as similar (monism) but are to be treated as distinct

- analytical categories made of the same material substance, what Malm (2018: 59) calls "substance monist property dualism". Such non-dualist thinking also informs the meaning of terms such as post/anti/non-capitalist and radical that we use interchangeably.
- 2 As an example, see Massarella et al.'s (2022) special issue in *Conservation and Society*.
- 3 Taluka is an administrative category in rural India comprising a collection of villages. A group of elected members called the Panchayat governs each village. Each village has a gram sabha, which is an assembly of all adult members of the village. They elect the Panchayat and convene multiple times a year to discuss village matters.
- 4 In India, the British passed some of the earliest known laws that facilitated game protection and state takeover of forests (Ross 2017: 246).
- 5 One latest contribution is Barkin and Napoletano (2023) who conceptualise these groups as 'communitarian revolutionary subjects' demonstrating their vitality to anti-capitalist struggles. For an expanded list see (Salleh 2010: 214; see also Longo et al. 2015: 188–203; Barkin and Napoletano 2023: 54–63).
- 7 As per recent government statistics, India has a forest cover of 21.71% (Forest Survey of India 2021: 28–29).
- 8 Adivasi is a Hindi word meaning original inhabitant. It describes all indigenous groups in India, of which there are over 700. About 10.42 million people or 8.6% of India's population is classified as tribal (official category 'Scheduled Tribes') as per the last census (Govt of India Census 2011). Korchi villagers referred to themselves using this term, so we use it as well.
- 9 Tendu leaves are commercially important since they are used to make local cigarettes (bidis), its fruits are a vital nutritional source. Flowers of Mahua have nutritional qualities and a local alcoholic drink is made from them, making it commercial valuable. Jamun is a seasonal fruit consumed in India.
- 10 AJ does not currently live there but her (ongoing) doctoral studies focus on Maharashtra.
- 11 CFR stands for community forest rights. It refers to forests to which villagers have been awarded rights.
- 12 One outcome of the collaborative documentation project on Korchi that NPB was part of is a video, available here: <https://www.youtube.com/watch?v=vD3VxRvIeuo>.

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