Ecology, Economy and Society–the INSEE Journal 2 (1): 77–92, January 2019

SPECIAL SECTION: Ecological Distribution Conflicts in India

Environmental Justice Movements in India: An analysis of the multiple manifestations of violence.

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Abstract: With each passing year, defending land and water, livelihoods and cultures appears to become more violent. Against the alarming number of murders of environmental activists or environmental defenders, which is the easiest way to recognize violence, this article aims to analyse other visible and invisible ways in which violence is manifested. Using a multidimensional approach and referring to case studies from the EJAtlas and other sources, it looks at the multiple manifestations of violence. It concludes that a south-south collaboration in academic-activist coproduced research on environmental justice movements would shed light on realities which often escape mainstream ecological economics and political ecology.

Keywords: EJAtlas, ecological distribution conflicts, multidimensional violence, environmental justice movements, political ecology

1. INTRODUCTION

On 8 November 2018, anti-coal activist Agnes Kharshiing and Anita Sangma were assaulted with stones and sticks, allegedly by coal mafia, under broad daylight when their car was blocked by a mob of 30-40 people, while returning to Shillong after a meeting with police officials in the coal town of Lad Rymbai in the East Jaintia Hills region of Meghalaya (EJAtlas 2018a; Saikia 2018).

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Published by Indian Society for Ecological Economics (INSEE), c/o Institute of Economic Growth, University Enclave, North Campus, Delhi 110007.

ISSN: 2581-6152 (print); 2581-6101 (web).

This incident is, in no way, an isolated case. According to Global Witness (2016), India has the highest number of murdered land and environmental defenders in South Asia, and the second highest after the Philippines in Asia. Every year, the act of defending nature and natural resources, which are often homes of the defenders, is increasingly becoming more violent, with reported murders of 197 defenders in 2017 across the globe (Watts 2018). In the EJAtlas the proportion of environmental conflict cases in India where environmental defenders (one or more) have been killed is about 12 per cent, roughly similar to the proportion in the world in general, larger than in Europe, lower than in Latin America.

Although murder or physical harm is the most common manifestation of violence, it is not the only way in which defenders of land, water, livelihoods and cultures are persecuted. Death is, of course, an extreme form of violence; these conflicts leave in their wake very many wounded people, and even those who escape physical harm, they bear the cost of manifold loss. Such violence manifests structurally, culturally, ecologically; it can be swift, and it can be slow (Galtung 1969; Nixon 2011; Zalik 2004). There are many studies that have analysed the interplay between environmental conflicts, violence and power relations (Omeje 2013; Peluso and Watts 2001). There are also some recent attempts beyond the case-study approach that analyzes different forms of violence in specific commodities, such as hydroelectric conflicts around the world (Del Bene *et al.* 2018). Navas *et al.* (2018) provide a multidimensional approach to understanding violence by looking at ecological distribution conflicts from Central America. This article aims to apply this framework in the Indian context to highlight the perverse ways in which violence manifests itself in environmental justice movements in the country.

The article is structured as follows: The next section provides the theoretical framework and methodology of this article. Section 3 provides a brief history of environmental justice movement in India and analyzes intensity of conflicts from the EJAtlas database. This is followed by a discussion of only a few cases to understand the different manifestations of violence, based on our experiences in different environmental conflicts and finally, the concluding section draws comparisons from other parts of the global South to promote the need for more south-south collaboration in academic-activist co-produced research on environmental justice movements.

2. THEORETICAL FRAMEWORK AND METHODOLOGY

Ecological distribution conflicts (Martinez-Alier 1995; Martinez-Alier and O'Connor 1996, Martinez-Alier 2002) can be studied as struggles for environmental costs and benefits emerging due to inequalities in power and income and are embedded in the broader context of race, class and gender inequalities (Robbins 2004). The Environmental Justice Atlas (EJAtlas), which was launched in March 2014, is a tool to document and catalogue ecological distribution conflicts around the world. The theoretical framework, rooted in activist knowledge and the bottom-up methodology of creation of the data collection form of the EJAtlas, is explained by Temper *et al.* (2015; 2018). We use data from the EJAtlas, complemented by our personal knowledge of some of the environmental justice movements through either fieldwork or secondary literature review, to discuss violence in each of the cases. Our definition of violence is based on the work by Navas *et al.* (2018) who suggests a multidimensional understanding of violence, classifying it into five categories and matching it with variables from the EJAtlas; the categories are direct violence, structural violence, cultural violence, slow violence and ecological violence. The value of such research lies in analytical instead of statistical generalization (Zografos and Martinez-Alier 2009; Gonzalez-Hidalgo *et al.* 2014). This research aims to add new perspectives to better understand not only what constitutes as violence in environmental justice movements, but also comparing them across different geographies in the global South.

3. ENVIRONMENTAL JUSTICE MOVEMENT IN INDIA

3.1. A Brief History

The environmental justice movement in India has a long history. The Chipko Andolan of 1973 is seen as the first environmental justice movement of the country, although concerns for environmental protection can be traced back to protests against the commercialization of forests in the early twentieth century under the British rule (Guha 2000; Sahu 2007). Such early grassroots resistances with ecological undertones like the Bengal peasant revolt of 1859-63 against Indigo plantations are considered to have resemblances to the present day protests against industrial tree plantations in the global South (Akula 1995; Gerber 2011). Gandhi's freedom movement also rang with concerns for the ecosystem and its people (Guha 1995; 2018). After independence, there was a heavy boost to large infrastructure for nation building such as multi-purpose dam projects and steel plants. Although this impetus on rapid industrialization couldn't bring the desired economic growth, it unwittingly ushered in a wave of

environmental justice movements in the country, such as the Narmada Bachao Andolan or the Appiko movement or the Silent Valley protest. The protests over the Bhopal accident of 1984 have lasted until today. Since 1991, after the liberalization of the Indian economy, 283 cases of ecological conflicts have been reported in the EJAtlas as of 24 December 2018. These cases account for more than one-tenth of all the environmental justice movements documented worldwide in the EJAtlas. Although this article draws from the EJAtlas, we are aware of other outstanding repositories of documented environmental conflicts and movements in India such as the Green Files, India Environmental Portal and Land Conflicts Watch (Bisht and Gerber 2017).

In the last 45 years, the hows and whys of environmental justice struggles in India have been reshaped in many ways. Yet, the basic premise of non-violent direct action, which follows from the Gandhian principle of Satyagraha, remains. It takes unique forms depending on the context, be it the Koyla Satyagraha (EJAtlas 2016) against coal mining in tribal areas of central India or Zameen Samadhi Satyagraha (EJAtlas 2017a) against land acquisition in Rajasthan. These mostly peaceful manifestations are sometimes met with direct violence, as evidenced by the number of cases with high intensity of conflicts, discussed in the next sub-section. In section 3.3. we then turn towards other ways in which violence is exerted.

3.2. Intensity of Conflicts

In the EJAtlas database,[1] each case can be categorized as a conflict with unknown, latent, low, medium or high intensity. Latent conflicts are those that are still brewing and have no visible organization. The low-intensity cases have some local organization while the medium ones have more visible mobilizations such as street protests, rallies etc. The high-intensity cases include more widespread mass mobilization, often including violence. Unknown intensity cases are the ones without sufficient information.

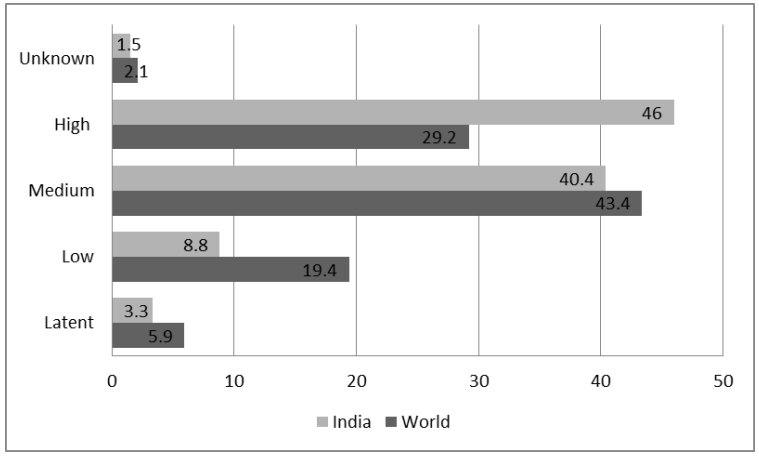
In India, more than 85% of the cases are either high (46%) or medium (40.4%) intensity cases. The low and latent intensity cases together constitute 12.1% with 1.5% of the cases remaining unknown in terms of their intensities[2]. A total number of 125 high-intensity cases have four categories: water management (28), fossil fuels and climate change (26), industrial and utilities conflicts (20) and mineral ores and building extraction (18), together constituting about three-fourth (92) of all the high-intensity cases. There are 24 cases of low mobilizations, which entail some local

[1] This sub-section has been abstracted from Roy (2018).
[2] These figures are based on the cases registered in the EJAtlas till April, 2018.

organization, and 110 cases of medium-intensity conflicts which entail visible mobilizations through demonstrations, sit-ins etc. This is different from the global picture, which has cases of medium intensity as the most frequently occurring one (43.3%). Figure 1 illustrates the percentages of intensity of conflicts for world and India.

High-intensity cases in India are the most frequent and they often have either the occurrence or the anticipation of large-scale displacement of people either for water management, which often involves the destruction of huge areas of forest land, or for opencast coal mining.

Figure 1: Percentages of Intensity of Conflict for World and India (in the EJAtlas)



Source: Roy 2018

4. MANIFESTATIONS OF VIOLENCE

We now turn towards in-depth analysis of a few cases from the EJAtlas, covering different categories and geographies within India to understand the multiple ways in which violence in manifested.

4.1. Direct Violence

The case of direct violence is perhaps the easiest to pinpoint. It refers to threats of bodily damage, physical intimidation and harm, and death as the most extreme case of direct violence. The category of high-intensity conflicts, which covers close to half the conflicts listed from India, points to all of this. However, as remarked above, the number of conflicts leading to deaths are only about 12%. In many of these conflicts, there are multiple simultaneous deaths, since the defenders are often killed during confrontations at protest marches or rallies.

One such case is that of the Kashipur bauxite mining conflict (EJAtlas 2017b). After the economic liberalization of 1991, much thrust was provided for the 'development' of the 'backward states', which comprised large forest covers with high concentration of minerals underneath and tribal populations inhabiting those forests. In this context, in March 1993, the new National Mineral Policy was announced opening the mining sector to private investments.

In the same year, the Utkal Aluminium Industrial Limited (UAIL) was formed as a consortium, originally as a joint venture between ALCAN, Canada; Hindalco of Birla Group, India; Tata, India and Norsk Hydro, Norway with the motive to mine bauxite from the Baphlimali Hills of Kashipur Block in Rayagada district in Odisha and construct an alumina refinery, also in Rayagada to refine it for exports. The open-cast mine was scheduled to produce bauxite. The project, however, was resisted since its very inception by the local indigenous people residing in the area, which although led to massive delays in the operationalization, was unable to stop the project in the end. Commonly known as the Kashipur anti-bauxite movement, it has a long and violent story, and is one of the historic environmental justice movements of Odisha. Kashipur Block in the Rayagada district has 412 revenue villages and 109 hamlets governed by 20 Gram Panchayats (GPs) with a total area of 1,505.90 sq. km and a population of 1, 21,044 (as per the 2001 census), out of which 61% belong to Scheduled Tribes and 20% to Scheduled Castes (Naik 2012; Padel and Das 2010).

The reason why the people resisted the project right from the beginning was their lack of confidence in the promises of employment, basic amenities and infrastructure and development, as NALCO had made similar promises in the early 1980s in the neighbouring regions for the creation of the biggest bauxite mine and refinery of the country. Opposition to the Kashipur bauxite mine was spearheaded by the Prakrutik Sampad Surakshya Parishad (PSSP) movement and several Adivasi-Dalit movement organizations in South Odisha in addition to various national and transnational solidarity groups, including actions against Norsk Hydro and the movement called ALCAN't of Montreal. PSSP had more than 1000 members, many of them tribal, many of them women.

These non-violent forms of protest systematically met with violent repercussions from the state — be it the police force, or the goons employed by the mining companies. The most memorable one is the police firing on adivasis on 16 December 2000 in Maikanch village of Kashipur block, killing three protestors (grassroots environmental defenders, as they would be called today), permanently disabling 6 and seriously injuring 30.

The people had put up a barricade on the road at Maikanch as part of their resistance against the alumina project. The day before the massacre, this barricade had prevented a delegation of political leaders from fraudulently representing the people in a 'multi-stakeholder dialogue' organized by the company at Nuagaon village. UAIL and CARE International (a corporate-funded NGO) had allegedly formed this "all-party committee" by handpicking representatives of various pro-project electioneering parties. The people forced these pro-project leaders to return to Rayagada, the district headquarters. The people alleged that the firing was a consequence of this action (Das 2001; Sarangi *et al.* 2005).

4.2. Structural and Cultural Violence

The different types of violence very often complement each other. In many cases, however, due to the presence of direct violence, it is hard to understand the extent of structural or cultural violence exerted on the marginalized. The case of Kalinganagar (EJAtlas 2014) shows how direct violence, resulting in multiple deaths, together with structural violence, achieved the continuation of the project.

Kalinganagar is located under Sukinda and Danagadi blocks of Jajpur district of Odisha. The place is located about 30-40 km from the district headquarters and about 100 kms from the state capital, Bhubaneswar. Government planned to convert the area into a 13,000-acre industrial centre. Factories located in the area would produce about 25 million tonnes of steel a year. Along with the steel factories, there would be an airport, a hospital, schools and new houses supplied with water and electricity. The Government of Odisha signed more than 40 MoUs with various private companies to set up the steel plants in the State. The Industrial Infrastructure Development Corporation of Orissa (IDCO) was responsible for developing the facilities for the proposed industrial complex. IDCO started acquiring land in the year 1992-94. Although IDCO had acquired the land in the early 90s, only a portion of it had been actually transferred to different industries and the remaining land was still in actual possession of people, who were cultivating it as before.

The IDCO allegedly purchased land from people at a minimal rate while it sold the same land to the corporate beneficiary at much higher prices. Also, the compensation for land was given to only those who had *patta* on the land (legal document of ownership). This left a section of people uncompensated, as they had no *patta* over the land they possessed. Another section of people, who cultivated land as sharecroppers, didn't receive any compensation. After acquiring land from people, IDCO sold the land to different industries at a much higher price.

The name Kalinganagar became famous when on January 2, 2006, the State police opened fire on a protest by local Adivasi against the takeover and seizure of their land by a Tata Steel plant. As many as 16 people were killed, four more died in the hospital, besides a police constable was also killed in the clash. Despite this, Tata's projects for steel making in Kalinganagar went ahead, portraying a concoction of direct and structural violence (Pandey 2008).

4.3. Slow Violence

The concept of slow violence, popularized by Nixon (2011), can be understood as delayed destruction of nature and bodies. The Centre for Science and Environment has been using the concept of 'slow murder' to explain the health effects of air pollution in Delhi, or the effect of using endosulfan in cashew plantations in Kerala (Narain 2017).

It is important to know that just because a conflict encounters slow violence, doesn't mean that it foregoes direct or cultural ones. The case of the Sterlite copper smelting unit in Tuticorin, Tamil Nadu, spanning more than two decades can be taken as an example of this (EJAtlas 2018b).

The Sterlite copper smelter plant had begun operations in 1996. Protests against the plant began almost immediately, with hundreds of fishermen blockading the port with their boats, in order to prevent the ships carrying copper ore from unloading in March and October of 1996. However, this did not stop the plant from operating. In July 1997, 165 women in a neighbouring factory—Ramesh Flowers, fainted as a result of a toxic gas leak from the plant. Some of these women later had miscarriages. Since then—over a period of more than two decades—villagers and local residents have been protesting against noxious sulphur dioxide leaks and bad effluent management. Since 1996, several complaints have been made to no avail.

In March 2013, the 'Anti-Sterlite People's Committee' started protesting following a gas leak incident on March 23, 2013, when many people from neighbourhood areas fell sick. It is common knowledge that the toxic sulphur dioxide gas is a by-product of smelting. After this incident, 5000 people participated in the protest, a bandh (strike) was called and the town was shut down for several days in March 2013.

Due to this, the Tamil Nadu Pollution Control Board issued a notice directing the Vedanta group company to close the plant. At the time, according to the Tamil Nadu Pollution Control Board, a sensor in the smelter's smokestack showed sulphur dioxide levels were more than double the permitted concentration, which resulted in a temporary shutdown of the

plant. However, the Supreme Court of India eventually permitted the plant to restart operations under the condition of a payment of INR 100 crore (~15 million USD at the time) to compensate for polluting the surrounding land and water sources since 1997 and for running the smelter without various environmental clearances for a few years.

In September 2017, the National Green Tribunal found the Sterlite plant responsible for dumping copper slag in the Upper Odai river and causing the blockade of the river stream. The judgment also revealed that between 2013 and 2017 the plant operated without authorisation under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008, and ordered Vedanta-Sterlite Group to compensate the affected villagers for the pollution it had caused.

Since then, aside from occasional resistance, it was not until the announcement for expansion of the plant that public anger revived strongly. The plant was set to increase the smelter's capacity from 400,000 tons to 800,000 tons per year within the next 24 months. In corporate statements, Vedanta-Sterlite stated that this expansion would make the Tuticorin smelter, "one of the world's largest single-location copper smelting complexes". Protests re-emerged with residents calling for an indefinite dharna (protest) and hunger strike on 12 February 2018. It was reported that in the beginning of February, villagers had petitioned the district collector several times seeking closure of the unit, but no action was taken, showing structural violence. The plant is located beside the fragile Gulf of Mannar, where toxic waste has damaged fish populations affecting the livelihood of thousands of fishermen. "There are lot of environmental dangers as well as health dangers, particularly cancer. Almost every house is affected by cancer. Children are most affected. Throat cancer has increased. Eye cancer has also gone up", Fathima Babu, the convener of the Anti-Sterlite People's Movement was reported as saying.

Eventually, when top district officials failed to reach an understanding, around 250 people began an indefinite fast. Over 500 people, including many women and schoolchildren, blocked the company gates until they were rounded up and arrested on 14 February 2018. Since then, protests had been ongoing day and night, especially in the villages surrounding the plant which were the worst affected

On 22 May 2018, the hundredth day of the peaceful protests, more than 20,000 villagers marched to the collector's office demanding the closure of the plant. Police were not ready to take care of such a large number of people, and shot at the protestors, killing 13 of them. Due to a lot of public and international pressure following this incident, when claims were made

on crony capitalism and industry-government collusion, the plant was finally ordered to be shut down. However, it is still not certain if this order will be carried out as the National Green Tribunal has termed the arguments for the closure of Sterlite plant as "hyper technical" (Thirumurthy 2018).

4.4. Ecological Violence

The case of an industrial sacrifice zone, situated in the north of Chennai, bounded by the Korttalaiyar river, Ennore creek and Bay of Bengal can be seen as an example of ecological violence (EJAtlas 2017c). The case was the topic of a study by ecologist Nityanand Jayaraman that later was converted into an acclaimed Carnatic song by T.M. Krishna. The song explains that Ennore creek (with its mangroves and fishing grounds) was a true Poramboke, a "commons", although the word Poramboke is now used in the sense of "waste-land" or even "waste-people".[3] This industrial area has three operational state-owned coal thermal power plants, next to the Ennore Port from where the coal comes. The site hosts several other polluting chemical industries, including paint, fertilizers, cement and pharmaceutical, as well as a landfill. This case combines issues of coastal protection and enormous environmental damage by industry and utilities and can be considered as a case of ecological violence.

Fisherfolks, environmentalists and citizens have complained against this ecological violence over the years. In recent years, fisherfolks lodged their protest against the industrial encroachment and pollution that has destroyed mangroves and adversely affected aquatic life affecting their livelihoods. The industries are expanding; apart from the three operating CFPP, another one has been cleared. Within 10km, there will be 6 000MW of coal plants. All have environmental clearances, but environmentalists argue that these documents mean little. Clearance by the NTECL (Tamil Nadu Energy Company Limited) has proclaimed that the "Boundary for the proposed power project would be outside the CRZ [Coastal Regulation Zone]". But the plant boundary encloses mangroves. This industrial hell of fly ash and fumes is far from the eyes of the city dwellers who benefit from the electricity and the other products. Instead, the people living here (such as fishers and immigrant workers), despite bearing all costs, don't get any of the benefits. We report two examples.

[3] The song, which is a cultural expression of environmental justice movement can be viewed in this link: https://video.scroll.in/826772/watch-tm-krishna-sings-to-arouse-people-into-preventing-chennais-environmental-degradation

The workers who have at once been employed to construct one of the power plants, now live with their families in miserable huts right on one of toxic fly ash dump without any facilities (water, sewage or electricity) and are left to their destiny. The residents are all casual workers, many from Odisha and Jharkhand. Environmentalist Nityanand Jayaraman reports that one Odiya worker from Keonjhar said: "We came here more than 15 years ago to build the power plant. We used to live there", he said pointing inside the plant:,"once it was built, we had to get out. Now we get by with odd jobs here and there". Sivanpadai Veethi Kuppam, an inland village of the fishing community, has been devastated by pollution, ill-health and dwindling catches. There are hardly any fish in the creek now, villagers report. Many species have disappeared. Those with boats sail to less polluted waters to fish. Others who use hand-cast nets walk along the banks all the way to the river mouth more than 8 km away, a full day's work with uncertain results.

Years ago, this area was home to mangroves and fishing communities. Today, the whole site is highly contaminated. Fly ash from the thermal power plant is dumped in the nearby riverbank and wetlands. Recently, locals notice the encroachment of wetlands. There are signs such as "This land belongs to NTECL" (Tamil Nadu Energy Company Ltd). Nityanand Jayaraman explains that these signs are a lie, as this was never land but water and wetlands. Until recently, this was a healthy marine ecosystem with life and livelihoods. Such sprawling wetlands are excellent flood mitigators. Their vast surface area allows them to swell and accommodate rain waters and tidal surges. Converting them into paved real estate will exacerbate flooding and deflect the impact of storm surges to less resilient areas.

On 31 December 2015, *The Hindu* (Yamunan 2015) reported: "Fishermen allege that mangroves have been destroyed at Athipattu owing to works undertaken by Kamarajar Port Trust". Fishermen in Ennore took to the streets protesting against the destruction of mangroves in the Athipattu area by a contractor engaged by Ennore Port (officially renamed Kamraj Port Limited, KPL). As severe floods had recently affected Chennai, the fishermen claimed that mangroves were crucial for limiting the damage during cyclones. Also, the vegetation breeds prawns, a major source of livelihood in the area. According to A. Venkatesh, president of Mukadhwarakuppam Kadal Meenavar Cooperative Union, a large area of mangrove vegetation was levelled by dumping rubbish. The activity was carried out on behalf of the Port.

In late November 2015, the Port faced similar allegations when activists claimed dumping of spoils of dredging in 400 acres of hydrologically-sensitive wetland area as part of the Port's development activities. In its

response, the KPL said it had purchased land to the extent of about 683 acres adjoining the Ennore creek from the salt department. The letter stated that: "... the dredged material has been dumped at low-level area at the south of North Chennai Thermal Power Station road where the land was purchased from the salt department. It is informed that filling is proposed in KPL land only and not in the waterbodies".

It also assured the natural flow of the creek would not be disturbed. However, Mr. Venkatesh disputed the claim and said the very fact that mangroves have been levelled shows that a very sensitive area has been filled. He told The Hindu: "This activity is also a violation of CRZ (Coastal Regulation Zone) notifications. Our community will scale up the protests if this does not stop immediately" (Yamunan 2015). The conflict goes unabated.

5. CONCLUSION

India has the highest number of cases reported in the EJAtlas database. But few are considered as successes in environmental justice. Using the multidimensional approach for understanding violence, we can argue that violence is manifested in one way or the other in every single conflict. Ecological distribution conflicts follow often a pattern of brutality and violence, human rights violation, asymmetric power structures and illegal methods and intimidation tactics to coerce the ecosystem people into giving up their land, livelihood and often culture. It must be highlighted then, the tremendous effort by movements which continue to remain non-violent (as most in India are) under such exertions of violence at different levels. It doesn't come as a surprise then, that environmental justice movements are claimed to be forces of sustainability (Scheidel *et al.* 2018).

Analyzing only a few cases, in the limited space of an academic journal article, has shown how different forms of violence overlap across and within conflicts. It is coherent with the findings of Navas *et al.* (2018), which further discusses the different ways in which environmental defenders and communities resist violence against them, and conclude that 'the common understanding of violence in environmental conflicts as a direct event in time and space is only the tip of the iceberg and that violence can reach not only environmental defenders, but also communities, nature and the many species living in, and the sustainability of their relations'. Violence has structural, cultural and ecological aspects. It is not only episodic, it is often slow and invisible for stretches of time.

In Central America, the resistances are not just against specific environmental injustices, but also against the violence of patriarchy and coloniality. In India too these links are probably present in the tribal population's resistance against internal colonialism, and in the role of women in environmental movements. They are largely unmentioned in the present article, and garners further research, both in the Indian context and comparatively with other regions of the global South. Meanwhile the role of Dalits both as victims and agents of resistance in environmental conflicts is one facet of political ecology of India that does not appear in the same form elsewhere (Sharma 2018).

The social metabolic processes are similar everywhere: the violence(s) and the resistance(s) are also similar (although India has a specific vocabulary of civil disobedience), as are the protagonists and the forms of mobilization of what we see as a global movement for environmental justice. What differs are the social, cultural and political specificities. In this regard, a future agenda for academic-activist coproduced knowledge on political ecology (defined as the study of ecological distribution conflicts) should aim towards more comparative south-south collaboration to learn from other parts of the world going through the same struggles and protests, with the aim to co-create a socio-ecologically just and equal society.

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