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"Now I am Constantly Sick": Environmental Degradation and the Impact on Toba Women's Health after Land Conflict

Perdana P. Roswaldy

Abstract

This article examines the intersection of land conflict, environmental degradation and women's health in the context of Toba communities in Pandumaan-Sipituhuta, Indonesia, through a feminist political ecology lens. It explores how land dispossession exacerbates gender inequalities, particularly the disproportionate health impacts on women. The research shows how indigenous Toba women internalise and reinforce patriarchal expectations, taking personal responsibility for their health despite external socio-ecological factors. This manifests through monitoring within the community, internalised misogynistic judgements and expectations of health performance. At the same time, the women's reliance on each other's labour in agriculture fosters solidarity, where health and labour become deeply interconnected. The article highlights how these dynamics contribute to a gendered response to environmental change, with women bearing a disproportionate burden in both health and labour.

Keywords: Indonesia, North Sumatra, Toba, land conflict, women's health, indigenous rights, feminist political ecology, gender, environment

In the dry season of 2019, I was helping Darmina[1] pick her coffee beans when she scoffed, "What's it even for?" I asked what she meant by "it" and "for". She raised her voice and threw a cherry-red coffee bean into her basket. "This! This! I work until I get sick, and for what? Ten or fifteen dollars a week?" She then continued complaining about how her back, head and legs ached. "Everything hurts." Her second migraine this week, and she still insisted on going to

Perdana P. Roswaldy, Department of Sociology, Northwestern University, Evanston, IL, United States; Perdana Roswaldy2018@u.northwestern.edu. This project has received generous financial support from the Arryman Scholarship of the Indonesian Scholar and Research Support Foundation (ISRSF), the Department of Sociology at Northwestern University, Kellogg's Dispute Resolution and Research Center, and the Land Deals Politics Initiative. I thank Steve Epstein for introducing me to the sociology of health, recognising the potential of this work, and encouraging me to publish it. I would like to express my sincere gratitude to Kelompok Studi dan Pengembangan Prakarsa Masyarakat for their steadfast commitment to the welfare of the people of North Sumatra, and for their trust and support throughout this research. I also deeply appreciate the warmth and generosity of the communities in Pandumaan, Sipituhuta, and Marade, who welcomed me during my ethnographic fieldwork. Their trust and collaboration were invaluable – *mauliate godang, sai hipas-hipas ma halak hita da*. This work is dedicated to all indigenous women worldwide, whose strength and resilience continue to inspire and shape my work.

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work. Her coffee production had started to produce fewer and fewer beans, and her weekly bean sales would never be higher than a cup of coffee in an artisan coffee shop, where her precious Lintong Arabica beans end up. Darmina is not alone in her complaints. Another woman farmer, Daniela, also told me bitterly that she was no more than a stupid country bumpkin who farmed for less money than she and her plants were worth. "I was only exhausted before, and now I am constantly sick."[2] These health complaints and problems are not just anecdotal for Darmina and Daniela, but represent a wider pattern among Toba women. Chronic migraines, frequent exhaustion, fever, and stress-related illnesses are among the common health problems that Toba women have increasingly experienced since the land grab.

In 2009, Toba Pulp Lestari Ltd, Indonesia's second-largest pulp and paper company, unlawfully seized 540 hectares of valuable frankincense trees from the North Sumatra indigenous Toba community of Pandumaan-Sipituhuta. After seven years of a David-and-Goliath-esque struggle, the Toba community secured a legal victory in Indonesia's Supreme Court. The victorious image of indigenous sovereignty, however, conceals an ongoing problem: the Toba women notice that they have experienced increasing health issues since the conflict. These health problems have not been addressed accordingly by their fellow village members and advocates because of the public overemphasis on their legal victory and the hope that the win would automatically restore community balance. The Toba women, however, have noticed that soil infertility and prolonged drought – a consequence of the land grabbing – have altered both the ecosystem and the women's own mental and physical well-being. For example, the drought and soil depletion have decreased their coffee production in both quantity and quality, which means less money despite the same amount of labour. Less money means they cannot afford to access better health care, and untreated illness leads to inability to work, which only exacerbates women's frustration and health issues.

The victorious outcome of the Pandumaan-Sipituhuta community may be unique, but their subsequent struggles and the negative impacts of the land grab are hardly an isolated case, given how land dispossession has only worsened in Indonesia over the last decade. When Joko Widodo was president of Indonesia (2014–2024), there was a glimpse of hope among the dispossessed indigenous communities, as he was (and remains) the first president without any ties to the political elite or the military. One of his main programmes in the first and second terms was agrarian reform, which quickly stalled, and skyrocketing land conflicts marred his presidency (Meckelburg / Wardana 2024). The Supreme

1 All names mentioned in this article have been anonymised to protect the identities of the individuals.

2 Interview conducted on 29 July 2019.

Court of Indonesia ruled against the state's claim over customary forests[3] in 2012, yet the implementation of this ruling has not gone as smoothly as expected (Bedner / Arizona 2019). The indigenous communities struggle with bureaucratic foot-dragging in their attempts to legitimise their rights to their customary land. Since the communities often have limited financial resources with which to register their land, agribusiness or mining companies can seize the land illegally, thus profiting from indigenous resources while the community scrambles to obtain maps and archaeological facts as proof of residency and ownership.

Indonesia has no specific policies for dealing with land conflict, although there are clauses for resolving land conflicts in numerous laws and their implementing policies in the areas of mining, agriculture, smallholding and land acquisition. This lack of policy perpetuates the difficulties of rebuilding communities after conflicts, particularly since there is so little prevention of such conflicts in the first place. From my ethnographic insights and desk studies of land conflict cases, most land conflicts appear to be resolved arbitrarily and predominantly in favour of the companies or landlords. The often one-sided and unfavourable resolution of land conflicts for the affected communities also shapes the advocacy work, which tends to emphasise land ownership, which, despite collective ownership, often belongs to male authority, thus neglecting women's specific or any gender-specific problems in the aftermath of land conflicts (Olivera 2005). With the number of unresolved land conflicts already set to rise to almost 3,000 by 2024 (Konsorsium Pembangunan Agraria 2023), the impact of land dispossession will only worsen – not only in terms of land equality, but also in terms of the quality of life of all those who have lost their livelihoods and land.

The forests of Pandumaan-Sipituhuta: A landmark victory for indigenous land rights

The lives of approximately 1,300 households of Pandumaan-Sipituhuta in North Sumatra changed in 2009 when a group of incense farmers discovered that loggers had felled the villages' frankincense trees in their sacred forest. This was the beginning of the conflict that would engulf the indigenous Toba of Pandumaan-Sipituhuta for the next decade. The loggers held a permit from Toba Pulp Lestari, Ltd. (PT TPL), Indonesia's second-largest pulp company, which has operated in North Sumatra since the early 1980s. The company's name is etched into the col-

3 "Customary forests" here refers to the official Indonesian translation *hutan adat* or indigenous community-based forest management, ownership, and governance. The title is recognised by the state and protected by law.

lective memory of the Toba people and residents of North Sumatra due to its long-standing operation and how it has continually caused land and environmental conflicts in the province (Silaen 2006). The villagers quickly organised themselves and contacted local advocates for support. Since the forest was legally disputed, the villagers expected the company to obey the regulation that should have halted or delayed the operation until the case was resolved. At the same time, the villagers and their advocates gathered evidence to show how the company had obtained the permit illegally and how its operations had affected the environment and economy of the villages.

One morning in 2013, while the men were entering the forest to tap the incense trees for sap and the women were working in their coffee or vegetable fields, excavators bulldozed more than 500 hectares of the sacred frankincense forests of Pandumaan-Sipituhuta; 700 households simply lost their primary income (Syahni 2017). PT TPL henchmen were intending to replace the frankincense trees with eucalyptus. A physical confrontation was inevitable, but the villagers were outnumbered, and the following days were filled with the presence of anti-riot police groups surrounding the forest. More villagers occupied the forest border, and a company truck was set on fire. The police blamed the villagers and raided houses late at night to arrest the suspects, terrorising entire communities. The land grab and police violence escalated the conflict, and in the first quarter of 2013, 31 men were arrested without warrants. Following the escalation and violence, women began to protect their male village members. "We hid our husbands and sons in the coffee fields," said Victoria,[4] and thus began to take on greater responsibility in in the resistance against TPL.

Putting women at the forefront of the movement was crucial for Pandumaan-Sipituhuta. This is especially important because the Toba people are a patriarchal society with a clear gendered division of labour. Pandumaan-Sipituhuta women are not allowed to enter or work in the sacred incense forest.[5] When women work on farms, they cultivate rice, vegetables and coffee. Nonetheless, the villagers perceived the forest as a unified ecosystem with the villages and therefore with their livelihoods as a community. Women insist that these forests belong to them and their children, even though they rarely ever enter the forest and a woman cannot inherit property individually (Simbolon 1998, Ihromi 1994, Kardashevskaya 2019). The women's connection to the forest is established through family narratives, i.e., how their fathers inherited the frankincense trees so that their husbands could make a living, and how the destruction of the forest would affect their crops.

4 Interview conducted on 10 July 2019.

5 This is not intended as a general statement about Toba communities across North Sumatra. Other Toba communities in the province permit women to sap frankincense. However, this is not the case in Pandumaan and Sipituhuta, where the restriction stems from local cultural beliefs and practices regarding gender roles.

Initially, the Toba women used the rhetoric and narratives of environmental justice that emphasised the ecological destruction caused by eucalyptus monoculture. However, after witnessing the land grab and how the company blatantly disregarded environmental laws, the villagers, their advocates and activists reframed their struggle, eventually focusing on indigenous rights (Silalahi 2020). In 2012, the Constitutional Court passed a ruling that recognises and acknowledges customary forests, thus excluding them from state control and ownership, meaning that customary forests are fully protected even from state nomenclature (Bedner / Arizona 2019, Arizona et al. 2019). The Court's 2012 decision was critical for future indigenous movements, as it undermined the power of the state and private companies to take over indigenous land under the pretext of development (Hidayat et al. 2018, McCarthy / Robinson 2016). Pandumaan-Sipituhuta villagers and advocates used the opportunity provided by the ruling to secure their position over the long term, an outcome that the existing environmental regulations in Indonesia could not provide. The challenge for the villagers was thus to prove to the Supreme Court that their forest was indeed customary.

In the years that followed, public campaigns for indigenous rights and legal battles ensued. Most challenges revolved around the search for hard evidence to classify the forest as customary. Hence, in addition to contesting the company's land claim, the challenge was to prove Pandumaan-Sipituhuta's indigeneity, from archaeological artifacts, oral history and other supporting documents and findings. Finally, in 2016, the Ministry of Environment and Forestry issued a decree that classified the Pandumaan-Sipituhuta forest as customary, revoking PT TPL's permit for eucalyptus plantations. However, the conflict was not yet resolved. Since plantation permits fall under the jurisdiction of the district, the regent where the villages are located must also issue a district bill recognising the new customary forest to avoid possible and future contesting land claims. The bureaucratic foot-dragging lasted until 2022, when the regent finally issued a bill recognising the villagers' 6,186 hectares of forest as customary. The entire legal ordeal championed Pandumaan-Sipituhuta as the trailblazer in indigenous property rights, as most legal struggles do not result in favourable outcomes for farmers or indigenous people in Indonesia (Berenschot / Dhiaulhaq 2023, Lund 2021).

The quiet monsoon: Environmental and gender shifts after the land grab

The victory of Pandumaan-Sipituhuta was groundbreaking, and the case helped to mainstream indigenous politics in Indonesia's public sphere. It is rare for indigenous people to win in court in so quickly – within a decade. Most land conflicts in Southeast Asia take at least two decades to resolve (Roughneen 2017), and the outcome is rarely in favour of the affected communities. Most importantly in the case of Pandumaan-Sipituhuta, the movement has re-centred indigenous women's struggle for environmental justice and indigenous rights in Indonesia. There has been a revival of indigenous women's politics since the late authoritarian regime in the 1980s (Komisi Nasional Hak Asasi Manusia 2016). For example, a dozen indigenous Toba women from the village of Ria-Ria in North Sumatra organised against the same PT TPL in 1977. The increased visibility and importance of gender in land struggles illuminates how a land conflict can affect communities and perpetuate the conflict's impacts even after it is resolved (Kardashevskaya 2021). Gender questions are often flattened into community problems in environmental and agrarian activism, thus failing to acknowledge and understand how problems after land conflicts may persist (Razavi 2011, Olivera 2005).

In the case of the Toba women of Pandumaan-Sipituhuta, two interwoven dimensions of post-conflict change have occurred: environment and gender. In addition to its valuable frankincense trees, the customary forest also serves as the villages' main water reservoir. Frankincense trees are fragile and require a stable ecosystem; they depend on the forest canopy to stabilise temperature (Woldie 2011, Lemenih / Kassa 2011), and the land grab has effectively destroyed such canopies. The bulldozing of 540 hectares of frankincense trees also influenced the water supply running through the river that irrigates coffee and rice fields, predominantly cultivated by Toba women. To date (2024), the bulldozed forest has not been replanted with frankincense trees. During my ethnographic fieldwork, and as reported by my informants, coffee and rice harvests became unpredictable after the conflict, with prolonged droughts and floods. The river's embankment a few kilometres below the incense forest has eroded due to the unstable water flow following the destruction of the water reservoir, and the resulting landslide has destroyed many families' rice fields. The women also complain of reduced production of their food and cash crops.

Most of the community's rice and coffee fields are located next to the river, and the deforestation, which destroyed the water reservoir, contributes to unpredictable floods that drown the fields. Even though it was the men's frankincense trees that had been destroyed by the loggers, the Toba women of Pandumaan-Sipituhuta immediately realised the ecological connection to the effects

on their own crops. While frankincense trees do not require much water, they must be kept in a healthy, connected ecosystem that ensures a consistent humidity to avoid rotten roots (Lemenih / Kassa 2011, Woldie 2011). The foliage also requires consistent moisture, as well as warmth from sunlight. What keeps the ecosystem going is the density of the frankincense tree canopy, which acts as a temperature regulator. The land grab destroyed the trees' connection and interdependence; the loggers also introduced irrigation as the company attempted to reengineer the soil to better suit the eucalyptus.

The 2013 land grab devastated the villages' frankincense production in terms of quantity and quality. Many households reported a 30–60 per cent drop in income compared to previous years ($400–$750 per harvest). Reduced production also affected women's land use, as they either replaced their husbands as breadwinners or now contributed equally to household finances by growing rice, coffee and/or vegetables. In my ethnographic fieldwork, in which I accompanied and observed Toba women working in the fields, I found that they spent more time on their farms than before the conflict and added more chemicals to their crops. They used more chemicals on their crops and rotated crops more frequently, which led to soil depletion and ultimately reduced their own harvests. The women were aware that they were spending more time working and using more poisons, and saw it as an effort to keep the family financially afloat.

The environmental destruction of the frankincense forest forced the Toba women to transform their own garden plots, where they planted small herbs and flowers. All the women in Pandumaan-Sipituhuta had small garden plots next to or in front of their houses. Due to the financial hardship after the land grab, they started selling these herbs (lime leaves, basil, bay). Many of the women interviewed in this research were distressed by the capitalisation of their gardens, seeing their gardens as "personal spaces" rather than a site of labour (Hosking / Palomino-Schalscha 2016). The women also started to use chemicals in their own gardens to enhance their small gardens' production. Thus, in environmental terms, women's spaces to actualise themselves were shrinking, and these spaces were entering the economic production of the villages. Both women and men in the villages were aware of these issues, but such concerns were left to the women to deal with, rather than becoming a collective problem to be solved.

The environmental changes in Pandumaan-Sipituhuta thus encroached on women's labour and space, which ties in with gendered changes. The land conflict disrupted the division of labour and altered the unequal labour values between men and women in the villages. It is important to note, however, that the gendered division of labour existed before the conflict. It goes beyond the fact that the frankincense trees belonged to the men and the rest of the cultivation in the villages belonged to the women; Toba society follows the tradi-

tional patriarchal division of labour in families, where women take care of domestic labour (Rodenburg 2013). Thus, household maintenance and other reproductive work falls on women's shoulders. Before the conflict, childcaring, for example, was exclusively women's work, and only a few households reported that their men had helped with childcare before the conflict. Even if men helped in the rice field during the harvest season, the daily maintenance of the rice field was the responsibility of women.[6]

The mass arrests and unlawful detentions in 2013 deeply scarred the villagers and forced them to change their organising tactics. Women, in particular, were deeply traumatised by the police brutality and forced their husbands to hide or become less prominent figures in the resistance. Even after victory, the image of resilient and strong indigenous women used for mobilisation persisted, as they temporarily replaced the village's main economic activity (incense production) with their own coffee and rice production during the conflict. This shift in economic production during the conflict continued after the conflict, making Toba women equal to their husbands in terms of income, if not the new breadwinners. The conflict brought women to the fore during the mobilisation, and changed the gender structure, performance and expectations of women during and after the conflict. This change is blurring the line between productive and reproductive work, with women increasingly becoming key actors in both. With their increased contribution to household finances, the Toba women thus became the breadwinners of the village and raised their gender awareness, challenging the Toba's highly patriarchal society. As the village economy declined, the women's rice and coffee plots became as important as frankincense as the main source of household income. The village women strengthened *marsiadiapari* (collective help), when they exchange labour by working in each other's fields.

Marsiadiapari is a woman-only collective help, typically constituted by 3-5 women, it had existed before the conflict, but it became more prominent in the aftermath of the villagers' victory. The system of collective help gave Toba women a sense of belonging, as they often lamented their subordinate status in the community. In principle, Toba women cannot obtain full individual ownership of their family's property and assets. Men control and own the family's land, and if a man does not have a son, he will pass the property and assets to the closest male family member or give them to his daughters' husbands (Simbolon 1998, Ihromi 1994). In short, Toba women need the presence of men to retain access to their family's land. Nonetheless, in collective property like the frankincense forest, everyone in the village feels a sense of ownership because of its economic impact and cultural and religious sacredness (Kelompok Studi dan Pengembangan Prakarsa Masyarakat 2021). Yet, the strict gender divi-

6 Ethnographic fieldnote, 12 December 2019

sion of labour and space still exists. After the conflict, however, women's dissatisfaction with the cultural arrangement of property increased, especially when they realised that they were now contributing equally to the household's finances but receiving less compensation than their husbands.

The conflict has created situations of vulnerability, prompting women to highlight and speak out about discrimination. Men are also aware of the changing gender landscape, and most acknowledged the strength of women during and after the conflict. During the months of my ethnography between mid-2019 to early 2020, I saw men taking care of the children while their wives worked in the fields. Angela, a middle-aged mother, said:

> This is new; usually, even when they [the men] helped us, they didn't want other men to see them doing so, because they would ridicule each other for that. And now my husband plays with my toddler while he waits for me in the front yard.[7]

The gender shift in the labour division is welcomed, but is not without its problems. Ironically, now that women are either the main breadwinner or the equal provider in the family, they are still doing more work in the household than men. It is this increased workload that drives the complaints of exhaustion and, to a serious extent, their continuing grievances after the conflict.

Gendered health and environmental change: Insights from feminist political ecology

This paper combines the perspectives of feminist political ecology of health (FPEH) and political ecology of labour (PEL). Political ecology, as used here, is an underpinning concept that requires further clarification. I describe political ecology as a framework that focuses on power relations, which may influence and be influenced by environmental changes and issues (Castree 2015, Forsyth 2008). Thus, environmental issues are not separated from the societal changes, which are constituted and facilitated by the power dynamics operating within those issues and changes. Feminism enhances the focus on power relations in political ecology by attending to patriarchy, racism and ableism, which are embedded within such relations (Elmhirst 2015, Mollett / Faria 2013). In particular, FPEH highlights the unique experiences of women and gender minorities in facing the intertwining issues of environmental and health problems. In doing so, FPEH connects gendered power relations, environmental changes and their implications for health, including both physical and emotional well-being (King / Crews 2013, King 2015). Since health is integral to the nature-society relationship, any political or power structure related to environmental issues will also

7 Interview conducted on 12 November 2019.

impact health. Gender is one of many structures and power relations that govern this relationship – especially in health, which is often regarded as a domestic issue in patriarchal societies (Mollett / Faria 2013, Nichols / Del Casino 2021).

The feminist dimension of FPEH is useful for addressing the aforementioned issues because it argues that more-than-human relations also constitute one's health and body, including the environment one inhabits. In other words, there is a connection between the body and health that responds to the environment, and vice versa. The relationship between the body and nature is also governed by gender structures that influence one's condition and experience within the environment, which can trigger a chain of reactions impacting other areas, including health. This relationship begins with the body, making it a key intervention for integrating health into the studies of environmental crises (Harvey 2000, Harcourt 2013). FPEH illuminates the social construction of illness and integrates the affective dimension of health, accounting for the bodily and emotional impacts of environmental and landscape changes without being limited to rigid biomedical norms. FPEH challenges the definitions of "health" and "being healthy", demonstrating how one's body, situated in a gendered ecosystem, is often assumed to be healthy (Baer / Singer 2016, Annandale 2008).

Under capitalism, what is considered as "healthy" often relates to the ability to perform work and labour to maintain the flow of capital (Andrews / Duff 2020). Thus, PEL integrates the labour and working-class dimension into environmental challenges, an important contribution following the putative understanding among political ecologists about the role of capitalism in environmental destruction (Swyngedouw 2011, Castree / Braun 2001). Working-class and labour perspectives, however, are rarely addressed in environmental issues due to a long history of capitalist antagonism between workers' interests in stable well-paid jobs and environmental consequences from their work in factories, mining or large-scale agriculture (Barca 2015). In the 1970s, however, a group of labour unions and strikes in Italy started the conversation of working-class environmentalism, asking "what, how, and how much to produce" and wondering how their own jobs had harmed their bodies and the environment while exploiting their labour (Feltrin / Sacchetto 2021). PEL thus examines how labour and the environment influence each other within the capitalist relationship that exploits both workers and nature.

In this paper, PEL provides a material basis that facilitates the study of women and their relationship to their changing environment, which is labour (Barca 2024) – both the productive and reproductive work that Toba women do to sustain their families and communities, which are threatened by land grabbing. Gender is therefore not simply a prescribed role based on sexual identity or cultural norms, but also what one does with these attributes. Despite its importance, gender remains an invisible dimension in land policies and social movements for land justice (Razavi 2009, 2011). The challenge then is

to understand specific contexts without making dubious generalisations about the correlation between environmental crises and gendered health problems. One challenge to understanding the gendered impacts of land dispossession is the data; land grab databases suffer from false precision and a lack of external validity (Oya 2015, 2013). The problem is rooted in the nature of land dispossession, which is highly contextual and depends on the community's unique social structures and land relations. Furthermore, the gender impact of land dispossession is often indirect, with many confounding variables, such as health, share of household work and even domestic violence. Ultimately, agrarian scholars agree on two things: 1) land grabbing contributes to ecological change, particularly in land use, and 2) land grabbing can worsen gender inequality (Kardashevskaya 2021, Park / Maffii 2017). As this study will demonstrate, both of these changes manifest themselves in women's health problems.

Despite their roots in radical and left-wing politics, agrarian movements in Indonesia are imbued with a patriarchal gaze that is detrimental not only to women but to the community as a whole. This is especially evident in community reconstruction efforts after land dispossession (Kardashevskaya 2021, Elmhirst et al. 2017, Peluso et al. 2008). Gender scholars have shown that despite the rising prominence and acknowledged significance of rural and indigenous women in land and environmental movements in Indonesia, they still experience sexism within their movements and communities. Many women feel abandoned because advocates and communities do not address women-specific issues that arise as a result of land dispossession (Komisi Nasional Hak Asasi Manusia 2016, Anthias / Radcliffe 2015). Because property is considered communal in many indigenous communities, women also sacrifice their own concerns for the greater good of the community. It is assumed that what benefits the community as a whole also benefits individuals within the community, regardless of gender. However, communal ownership and values do not equate to fair distribution of labour and compensation.

Given this gender inequality, women bear a disproportionate burden in community rebuilding efforts. Research has shown that women's labour burden increases after land dispossession, and this burden often correlates with women having to work harder in their vulnerable environment (Awumbila / Momsen 1995, Cutter 1995, Dzialo 2017). The changing ecosystem requires women to work longer hours for the same or even less monetary compensation. This can worsen during community rebuilding, as it is often the job of women to raise the morale of families and communities after traumatic conflicts. The fatigue and exhaustion that women complain of in the aftermath of conflict has both material and emotional roots. Land conflicts often raise gender awareness among women, prompting them to find language to voice their concerns.

In the case of the Toba community, health is the dimension in which such gender problems manifest in the community's rebuilding processes, which are

confronting environmental problems in the aftermath of land dispossession. With environmental degradation jeopardising land productivity, the Toba women of Pandumaan-Sipituhuta play a vital role as community activists, but without significant material compensation. The lack of compensation increases health issues among women, while also, ironically, financially limiting their access to healthcare. The women thus develop new coping strategies in order to ease their physical ailments, by relying on each other for informal health remedies and sharing workloads. However, the women's own resourcefulness and perseverance in these health-seeking behaviours ends up reinforcing patriarchal indigenous values of Toba women as "tough", "hardworking" and "selfless", who will sacrifice anything for the greater good of the community. The case of the Toba woman in Pandumaan-Sipituhuta illuminates the reality of indigenous women's work and conditions in the aftermath of a land grab, behind the victorious image of their resilience and fierce resistance.

"I was only exhausted before, now I am constantly sick": Toba women's health experiences

All the data and narratives presented in this paper are drawn from ethnographic observations, field notes and interviews collected predominantly from the villages of Pandumaan and Sipituhuta between mid-2019 and early 2020. My main informants were indigenous women (n = 27) and men (n = 10), ranging in age from 32 to 70. I triangulated and constructed the history of the land conflict by interviewing their advocates from another district (n = 5); these advocate interviews also helped me to understand the difficulties of rebuilding a community after conflict. All names in this article are pseudonyms to protect the privacy of my informants. Ethnography within the sociology of health and illness emphasises people's subjective interpretations of health and health practices (Anspach / Mizrachi 2006). Using this methodology allowed me to construct an understanding of Toba women's subjective health experiences and how these experiences are linked intrinsically with the land and land politics.

My ethnographic work centres on the intersection of labour, environment and women's health-seeking behaviours. To explore the environmental narrative of this research, I conducted observations of women working in their coffee and rice fields. I closely attended to their complaints during these activities and enquired about the specific challenges of their work in the field. Additionally, I collected soil samples to corroborate the women's accounts regarding the poor quality of their land, particularly for coffee cultivation. These samples confirmed that the soil in the coffee field was indeed of low quality, characterised by high acidity. In contrast, soil from the rice fields exhibited better quality, but the

rice fields faced significant risks of soil erosion due to their proximity to a riverbank. During my fieldwork, the rice fields endured frequent flooding, experiencing two to three floods per week throughout the planting season.

For the health-related aspect of this study, I observed the Toba women's common dietary habits, guiding principles and the use of generic household drugs and remedies (e.g., aspirin, ibuprofen, muscle creams, essential oils). Health-seeking behaviours were evident in daily life but rarely involved formal medical authorities. Instead, women mostly relied on friends, family members and traditional healers to address their health concerns. Alongside ethnographic observations, I conducted semi-structured interviews focusing on women's labour, which provided insights into the health constraints arising from their work. I also documented community-level responses to health and well-being issues by attending campaigns addressing stunting (impaired growth among children due to malnutrition) and participating in weekly well-being activities organised by the community clinic located on the outskirts of Pandumaan and Sipituhuta. I do not claim to make generalisable conclusions about environmental and gender changes following conflict, as the case of Pandumaan-Sipituhuta is unique, even within the broader context of indigenous rights movements. Instead, this study aims to provide insights into what might occur in the aftermath of a land conflict, and how subsequent events are shaped by gender dynamics and influenced by environmental changes.

Losing their own garden: Toba women's attachment to the land and longing for safe spaces

On 16 July 2019, five women from Pandumaan-Sipituhuta gather in front of Darmina's modest stall, sharing their experiences in the aftermath of the land conflict. The conversation begins with a discussion of persistent poverty, a challenge not only in their villages but also in many rural areas across Indonesia. Among the twenty-seven families I interviewed, the average monthly income is $110. Only two families earn more than $500 per month, as they own larger plots of land. The conversation shifts to the women's clear frustration with receiving less money for more work, a trend they observed following an overall income loss in the households. Either their husbands lost their frankincense plots altogether, or frankincense production decreased due to environmental degradation and deforestation caused by the land grab. As a result, the women assumed a more significant financial role within the household, either becoming the primary breadwinners or co-contributors to household income. The commodities they sell – such as coffee, rice and herbs – are typically priced lower than the delicacies, such as frankincense, cultivated by the men.[8]

8 This aligns with Elson's (1995, 1999) analysis of women's labor, which is both undervalued and overburdened.

Many women became visibly agitated when I asked them about the impact of the conflict on their lives. "I feel just so exhausted all the time," says Leona, a married farmer from Sipituhuta. "We won our land back, but the only difference is that we just have no emergency meetings or blockades anymore." Leona also expressed frustration about her two children who had just entered school and the declining state of her aging coffee plots.[9] During the conflict, women often had to abandon their plots in a hurry whenever the church bell rang, signalling either the arrival of the police or plantation companies in the village, or calling for an emergency community meeting. In the aftermath, the increased agricultural labour burden on women, as they tried to compensate for lost income, heightened their sensitivity to the changes in their environment, as Leona also added:

> It's like we put more work in every single day, but there will always be something that just ruins our effort, you know? Just two days ago, someone's rice field slid down to the river. Now I'm worried about my own, especially later [during rainy season]. We have more floods these days.[10]

Feminist scholars emphasise the connection between women's bodies and their surrounding ecosystems, rejecting the binary distinction between humans and nature. Instead, the body is seen as "a point of mediation" between the self and nature (Field 2000: 40). In this context, the health concerns, such as the aforementioned migraines, frequent headaches, and exhaustion, faced by the Toba women reflect the disruption of reproductive processes – both labour and household duties – caused by ecological changes.

The labour performed by Toba women in Pandumaan-Sipituhuta is an embodied experience that becomes an extension of themselves. Working in the fields is therefore not solely driven by financial or household obligations, but is also integral to their self-actualisation, as illustrated in the following field note excerpt:

> [Field note: 15 August 2019. Assisting Pauli with cleaning her field] I accidentally stepped on her small and aging tamarillo. She caught me red-handed, and her eyes almost jumped out immediately, and her lips puckered in distaste. "It hurts!" she yelped, her fingers pointing at my footprint. "Don't hurt me," she pleaded. I laughed and straightened the tamarillo's soft and weak branches that I had just crushed – thinking she was joking and overdramatic. But then I looked up at her face and saw she was serious about being and feeling hurt. Her body was twitching until the plant stood the way it used to be. […] Then her attention moved to some broken coffee roots, and she said, "These cows climbed up to my field, and their feet dug the soil, eroding my plot. When I saw it, my whole body was aching; my whole work immediately weighed down onto my shoulders."

Pauli's emotions are an affective response to the damage I caused to the crops. Her feelings are also material, stemming directly from working so closely with

9 Interview conducted on 19 August 2019.

10 Interview conducted on 19 August 2019.

her tamarillo plots, to the point that she feels what the tamarillo plant feels. A feminist perspective on women's bodies and the environment suggests that a woman's work, including the workspace and the object within, is an extension of her bodily sensations, allowing her to feel and understand the environment in a deeply embodied way (Harcourt 2013, Rasmussen / Brown 2005). This argument should be expanded. By examining the labour itself, we can better understand what distinguishes the body-mind connection in relation to a woman's work and the ways in which she performs it.

The Toba women's response to socioecological changes in their labour extends into the domestic sphere, particularly affecting their opportunities for self-care. Tiurma recalls how her garden, once a space for stress relief, has now become "her work too".[11] Before the conflict, she planted herbs and flowers in her garden, a hobby many Toba women practice. Following the conflict, her garden turned into what she called "her small business". Tiurma replaced her flowers with "anything that will sell in the market", filling it with onions, chilli peppers and other herbs. This frustrated her because the destruction of her husband's frankincense plot in the forest forced her to change her garden sanctuary into a money-making venture. Because her produce does not yield the same high prices as frankincense, and due to the small size of her plot, she can only earn a limited income from it. "But I work like a horse … only to lose my garden," she says. She complains that now, after a long workday in the field, she no longer has anything beautiful to look at – referring to her flowers – which "stresses her out".

Gender challenges many assumptions about land and environmental problems in rural areas, particularly the problem of women's landscape and space in the aftermath of conflict or monoculture expansion (Jegathesan 2021). The focus on male-controlled property often ignores other landscapes and spaces where women can find individual and collective privacy outside patriarchal expectations (Agarwal 1994). Ecological crises narrow the space for women's self-actualisation and limit financial opportunities (Bell / Braun 2010, Kennedy / Dzialo 2015). Under these conditions, if a woman needed to escape her household or community, she could not do so. The case of Toba women highlights that this narrowing does not necessarily correspond to the longing for the natural world and the image of rural peace, but rather a material concern for the women's social-reproductive activities. Yet, if they fail to meet these expectations, the women become even more sensitive to the compensation of such labour.

11 Interview conducted on 11 October 2019.

No place for complaints: Women's health as the ability to work

Due to the inequality in health infrastructure, people in rural areas of Indonesia often rely on informal networks, which contributes to the widespread distrust of medical professionals and the persistence of many basic health problems in these regions (Laksono et al. 2023). Women's health is perceived very differently from men's health in Pandumaan-Sipituhuta, as illustrated by my interaction with Tina, the local state public health campaigner:

> [Field note: 21 August 2019. Post-general check-up for the village women] One of the health educators, Tina, explained to me that they rarely held general check-ups for men. Men's conditions are "more complicated" and often involve "life-threatening illnesses" that require more sophisticated hospitals. Women, on the other hand, are prone to some "long-term ailments" (likely to be chronic pain and diseases) that hinder their ability to work. Tina said that women are very concerned with their work ability; hence, any complaints they have would automatically relate to their domestic and/or productive work. Indeed, one of the patients that I saw today said that she got frustrated with her filariasis because she "couldn't take care of her granddaughters" while "the mom works in the field". Tina looked worried when she explained how much work the women did. Her eyebrows were twitching as she disclosed that most women in the village have "sugar sickness" (i.e., diabetes, usually type 2).

In this example, women's health is framed vis-à-vis their capacity for work. Being healthy becomes a mandate for women because their labour is now a necessary source of income in the aftermath of the land grab. The embodiment of labour previously mentioned thus also depends on how women perceive their health. In other words, if women tie their labour to themselves, being healthy equates to self-sufficiency and productivity, while becoming unhealthy reflects the opposite.

While it seems that exhaustion is expected for hardworking peasant women, the Toba women highlight the rising frequency of their ailments. One of the ailments that they often complained about was cluster headaches or migraines, which they correlate with "too much thinking". Daniela, for example, told me that she constantly had to calculate the household finances because now her family income always fell short. At her farm, she also had to think thoroughly about which plants could provide more money for her family now that her garden plots were also a source of income.[12] Daniela's story is shared by other women, especially with the older ones with smaller plots of land. The constant varieties of headaches eventually result in fever or other ailments, such as back pain or flu during the monsoon season. Throughout my ethnography, at least one or two women in *marsiadiapari* groups became sick every week (fever, debilitating headache, back pain), to the dismay of their groups. These ailments were treated at home without any professionals from the primary clinic. The

12 Interview conducted on 20 August 2019.

women keep generic medications (i.e., ordinary painkillers) and several antibiotics that the clinic nurse occasionally gives them.

Another great concern of the women is their nutrition, which eventually impacts their health – and, in many cases, also perpetuates their ailments. Tiurma, for example, complained that these days, she often ate instant noodles to save up her family's rice stock. The family used to be able to stock rice for six months, but Tiurma has also started selling that rice portion, too, since the company bulldozed her family's frankincense plots. The soil erosion also partially destroyed her rice field, hence the extreme decrease in the rice stock. "But of course, I cannot sacrifice my husband. He's old already. He cannot eat weird things like an instant noodle."[13]

Other women share this dietary decision when facing a scarcity of nutritious foods. They typically let other family members eat well, while they eat unhealthy and unfulfilling diets such as rice with crackers or salt, instant noodles or simple fritters. Such a diet often exhausts women faster when working in the field. The high-carbohydrate diets that they often consume thus perpetuate the "sugar sickness", something that Tina also confirmed has been rising in the last three years.

While it is clear for the Toba women in Pandumaan-Sipituhuta that their exhaustion, health concerns and grievances persist, little has been done to structurally address their problems. The centrality of their sacred forest glosses over the ecological crises to which the land dispossession contributed and the women's distress is linked. The grievances manifest most vividly in their health complaints: exhaustion, headache, ailments and fever. They also reenforce the belief of "hard work payoffs" that mostly follow the patriarchal stereotype of a good Toba woman who cannot afford to be sick (Simbolon 1998). The absence of platforms to solve their problems also forces Toba women to focus on health on their own terms, furthering their reliance on self-disciplinary mechanisms and informal medical opinions.

This process of maintaining one's health takes on a neoliberal form, which I define as the individualisation of health responsibility. Under this condition, women's health issues, which were exacerbated by the land grab, are framed as personal failures or an inability to care for oneself, ultimately disrupting their collective work. The case of the Toba women highlights the tension between the individualisation of health responsibility and the collective obligations within a community that was meant to be their safe space. However, the women's monitoring of each other's health and responsibilities extends beyond women merely disciplining each other; it is shaped by patriarchal expectations for women to embody the role of the "good" and "hard-working" Toba women.

13 Interview conducted on 15 August 2019.

"If women get sick nothing gets done": Women's internalisation of patriarchal expectations

The expectation for women to be healthy stems from men projecting – and recognising – their own inability to protect the environment as effectively as women do. Men reinforce women's obligation to stay healthy, even as they acknowledge women's strength and role in the community:

> [Field note: 22 December 2019. Breakfast before leaving for Chicago] Marsel (M, 70) laughed as he handed me a pack of goat milk powder. "Your mother [referring to his wife] drinks this so she won't get sick. Women work so hard and do so much; they cannot afford to get sick." I laughed upon hearing that. Marsel then continued, "Right? They're the ones who built all of this [rice barn]. I cannot work the way women do. Don't you care less if it's your dad who is sick? If I get sick, nothing happens. If women get sick – and cannot work – nothing gets done."

Marsel's statement demonstrates how the risk of "nothing [getting] done" is inherently gendered. I do not suggest that men are free from gendered risks to health related to labour. Several of my female informants noted that the loss of income from their husbands substantially impacted women's labour during the conflict. Women had to work "more and harder" to compensate for their husbands' lost income. However, it is important to emphasise that such language of "working harder" also implies that men fail to contribute to alleviating the burden of women's labour and the associated hardships. The bodily manifestation of these complaints is tangible, not just an abstract recognition of one's labour (i.e., that husbands earn more within the household).

Marsel highlighted how men benefit from women's labour as a means to compensate for the work that men either cannot or are not expected to perform, such as maintaining and cultivating the rice fields. More importantly, the notion that "nothing gets done if women get sick" has become a patriarchal narrative that Toba women themselves reenforce and internalise within their collective work. This expectation specifically demands that women remain healthy so they can continue working tirelessly for their families and the community. This narrative not only perpetuates but also deepens the benefits men derive from women's labour, as men's incompetence and underperformance in many household tasks are normalised and accepted. Thus, when women monitor and discipline one another, it is not solely out of annoyance or concern over disruptions to their workflow and schedules. Rather, this surveillance also serves to fulfil patriarchal expectations that leave no room for – and even punish – women for being sick or incapable of working. In other words, the women internalise the idealised image and prescribed role of the "good" and hard-working Toba woman.

If women's illness is considered their personal responsibility, men's sickness, in contrast, becomes everyone's responsibility. Rarely did I encounter or hear

of men independently seeking medical assistance, and none of my male informants mentioned initiating health-seeking behaviours on their own. Marsel's remark that "nothing happens" when men are sick primarily reflects the lack of any disruptions to the household workflow, given men's lower contributions to household chores and field labour. However, that "nothing" is actually something; when a man in the household falls ill, it requires a shift in women's focus to care for their husbands. Marsel's wife, Ruhut, commented, "Men cannot do anything, so he [Marsel] becomes my job too."[14] On the other hand, women internalise the obligation to stay healthy due to their established labour networks and strong sense of responsibility to their groups. Eventually, they adopt the notion that they cannot afford to get sick, as the household burdens now rest primarily on their shoulders. Through the merging of their embodied labour and their sense of duty to the community, Toba women reinforce this obligation, extending their care to include men as well.

This is not to suggest that Toba men are indifferent to their wives' well-being. However, they frequently rely on women's "cognitive labour" – a form of unpaid work that involves anticipating needs, making decisions and monitoring tasks (Daminger 2019). Cognitive labour is often observed in heterosexual and/or heteronormative couples, where the responsibility for the daily maintenance of the household disproportionately falls on women or the partner assigned a more feminised role (Calarco et al. 2021, Dean et al. 2022). Rina, a woman farmer and mother of three, told me that she "cannot stop thinking about many things at the same time". Following the conflict, Rina had to rearrange her household budget due to the significant drop in income. She emphasised how this financial decline negatively impacted her family's access to medical care. In response, Rina took the initiative to educate herself about maintaining general physical health and established informal networks to improve her access to healthcare.

Helping and monitoring each other: *marsiadiapari* and Toba women's social and labour dynamics

In the absence of structural aid, Toba women rely on each other to take care of their health, in spite of the individualisation of health responsibility. Women visit those who are sick and ensure that the sick can return to work as soon as possible by temporarily taking over household duties. This includes child rearing, cooking and working on the sick woman's field, with the expectation that the favour will be repaid once she has recovered. This process is rooted in their *marsiadiapari* (collective work) system, where women collaborate and depend

14 Interview conducted on 20 July 2019.

on each other to work the land. The *marsiadiapari* system is typically organised weekly, with women informally agreeing on when and how long they will work together in each other's fields. The level of cooperation within *marsiadiapari* is determined by emotional and cultural factors, including friendship, age and familial ties. This collective labour system incentivises women to stay healthy, ensuring they can contribute to the group's work. The obligation to maintain good health is therefore reinforced not only by the financial challenges faced by their families and community but also by the expectations of other women who depend on their labour. This solidarity is closely tied to monitoring and ensuring each other's well-being, particularly in terms of health.

The increased labour burden compels women to monitor and criticise each other regarding their health. Participation in *marsiadiapari* comes with the expectation that women will show up, be reliable and maintain their health. "We already have enough problems at home," Yasmin explains, "We don't need more problems from people we consider friends."[15] While no strict rules are formally imposed within the *marsiadiapari* system, failing to show up still results in tangible material and cultural consequences. For instance, when Marina caught a fever and was incapable of helping her friend, Susana, it did not take long for her peers to start gossiping about her. "If she keeps herself fit, there is no need to be sick, right?" blurted Susana to a group of her friends in a stall where they often come together. Interestingly, this statement highlights an interesting tautology embedded in the gossip about Marina: the assumption that by simply "keeping herself fit", Marina could entirely avoid illness, thereby negating any reason for her absence.

The gossip eventually reached Marina, and instead of making an excuse, she agreed that she should have been more considerate: "I, too, would be disappointed if my friends do not show up to our agreed *marsiadiapari* schedule."[16] The expectation for women to be reliable for one another may seem to operate only at the discursive level – or, at least, stops at the level of judgement. Yet this judgement materialises and functions as a form of social control. Toba women use gossip, slander and confrontation to demand healthiness and labour from each other. Even when comments felt overly harsh, the women rarely rejected the judgement outright. Instead, they often responded by appealing to the expected roles of women, using these same norms to defend themselves. Although Marina agreed with her friends, she felt that the comments about her health were too harsh. "I'm a mother too, you know. They are all mothers too. They should have understood." However, Marina did not elaborate on what kind of understanding she expected from her peers, admitting instead that she "would have reacted the same anyway if that happened" to her.

15 Ethnographic fieldnote, 20 August 2019.

16 Interview conducted on 23 August 2019.

While the villages of Pandumaan-Sipituhuta largely rely on agriculture, not all Toba women are engaged in farming. A few women do not work on farms, either because they do not need to or because they work in non-agriculture sectors. Women who work on farms do not necessarily envy those who do not, but during my fieldwork, I observed that they often compared themselves to the latter. Sarah and Marina , both farmers who took pride in their hard labour, described homemakers in the village as "unreliable" or "having it easier".[17] In this instance, the farming women reinforce the image of "strong indigenous women" who (re)build their communities. Their remarks are not necessarily rooted in petty bitterness but rather reflect a sense of resentment stemming from their poorly compensated labour.

Once I asked Darmina what she thought about her neighbour, Eloise, who does not have to farm because her husband works as a private chauffeur for a local politician. Darmina responded:

> I am not sure, to be honest. I can say I enjoy working because it's actually good to keep myself fresh. But surely, if I don't have to [work] and still get money, I don't see what's wrong with [that]. But you know… if you do not work, what else is there for someone like me?[18]

"Someone like me" refers to an indigenous, uneducated and impoverished woman with limited opportunities. Darmina's statement embodies a longstanding debate in feminism about the nature of work for women under patriarchy and capitalism. Trapped between severe poverty, fragile ecosystems and the perpetuation of patriarchal hierarchies, work becomes more than a necessity for survival – it is a means for Darmina to uplift herself and her community, something she can take pride in, and that becomes an integral part of her identity.

Conclusion

The experiences of the Toba women in Pandumaan-Sipituhuta offer a complex narrative of gender, health and labour, shaped by both traditional norms and external socio-ecological pressures. While existing literature has shown how land grabs can have gendered effects that are disproportionate to women, this article aimed to analyse the mechanisms of such disproportionate effects through health outcomes and the shift in gendered divisions of labour after a land conflict. The case of Toba women in Pandumaan and Sipituhuta also provides a critical insight into the everyday lives of indigenous women who tried to rebuild their lives after a land grab that disrupted their communities and livelihoods,

17 Ethnographic fieldnote, 10 September 2019.
18 Interview conducted on 12 September 2019.

even as they regained their land. Throughout this article, we have seen how the women's roles within their households and communities are not defined solely by the gendered division of labour but are deeply influenced by environmental changes, particularly following the land grab. These changes have significantly affected their physical and mental well-being, forcing them to navigate the compounded burdens of work and health. The shifting ecosystems and reconfigured labour structures have intensified the demands placed upon them, both individually and collectively.

The Toba women of Pandumaan-Sipituhuta represent more than just a story of gendered divisions of labour. This case illustrates how women are impacted by external forces, beyond their households and immediate environment, and how these impacts are embodied through their health. Specifically, the changing ecosystem and subsequent reorganisation of their labour have added to their physical and mental burdens. This process unfolds both on individual and collective levels: individually, for themselves and their families, and collectively, for the broader community of women. The structural consequences of their culturally prescribed roles and gendered labour expectations only reenforce the existing gender divisions. The affective drive they extract from labour and its social relationships crystallises into their individualised outlook on health. By focusing on the grievances women expressed after the conflict, and how these manifest in their health, it becomes clear that for Toba women, their health is inseparable from their labour.

My research illuminates on how the intersection of gender and the environment influences health in the context of land dispossession (and subsequent repossession). Two key dimensions are crucial for understanding the long-term effects of widespread land dispossession in Indonesia: 1) the impact of environmental degradation on gender norms and values, and 2) how these socio-ecological changes manifest in women's health. The two aspects are interconnected and inseparable, not because of any presumed romantic relationship between women and nature, but because of the reproductive, household and care labour that women are made responsible for and enact within their community ecosystem. Land dispossession alters this relationship.

The alarming rate of environmental conflict and land grabbing in Indonesia since 2014 has highlighted the question of land titling and ownership. However, the question of ownership conceals the everyday social lives that make land liveable and cultivable, in which most of such work is gendered and falls onto women's shoulders without any compensation. This gendered dimension of land dispossession only perpetuates the community's vulnerability after the conflict. Without designated frameworks or policies to resolve land conflicts, the effects of land dispossession will remain, even as the afflicted community wins its land back. It is hard to ignore how land grabbing exacerbates rural poverty, which eventually widens inequality in Indonesia. The promise of agrar-

ian reform by policymakers should concern not only the possession and use values of land but also how lives are intertwined with land and how this relationship affects the inhabitants' quality of life.

In the case of Pandumaan-Sipituhuta, the relationship between ecological crisis and gender manifests in various health issues for Toba women to navigate. The health dimension reveals the inherently gendered nature within the struggle for environmental and land justice, one that is often missed in mainstream studies and advocacy. It is possible for women's rights to be championed in some areas, while women are simultaneously subjugated and disenfranchised in others. The overemphasis on property claims and ownership signifies a patriarchal understanding of land and ignores the gendered labour necessary to protect and manage it. It is thus imperative to rethink how agrarian movements approach and centre gender issues in order to prevent the perpetual precarity of indigenous women.

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