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Gendered extractivism in Uganda: implications for Just Transitions

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Abstract

Critical analyses of extractivism have demonstrated that it frequently involves interconnected gendered impacts on local communities. While gender equality has become an important concern in the literature on sustainability and economic development, more intersectional and decolonial feminist critiques of extractivism are only slowly entering mainstream debates even though they offer important perspectives for thinking about the socio-political challenges Just Transitions are likely to face, especially in African countries with weak governance systems. This paper contributes to the understanding of the potential gendered impact of putative just transition programmes in Africa through the analyses of different gendered impacts in three zones of resource extraction in Uganda, namely mining in Karamoja, a sugar cane plantation in Mabira Forest and oil extraction via the East African Crude Oil Pipeline (EACOP). Employing an intersectional and decolonial feminist lens, the paper identifies three gendered dimensions of extractivist impacts, namely sexual violence, barred access to basic necessities and dispossession of land. It is vital to take these challenges seriously in order to avoid reproducing such gendered impact in attempts to achieve a Just Transition in Uganda and countries with similar socio-economic profiles.

1. Introduction

The extraction of resources is a vital part of the global capitalist economy. Critical studies have demonstrated that extractivism, commonly understood as intensive export-oriented resource extraction (Gudynas 2010; see Gómez-Barris 2017, Nygren *et al* 2022), frequently has negative gendered impacts, particularly across contexts in the Global South. Often women are underpaid, work without protective gear and are not able to make decisions about their wages (NAPE n.d.). They often assume the 'double duty' of wage labour while also being responsible for domestic work, food provision, child rearing and care for the elderly (Pinker 2020, p 10).

While such studies have been vital in highlighting the gendered impacts of extractivism, they often remain confined by a focus on inequality. Climate justice, intersectional and decolonial critiques have revealed more systematic and multi-dimensional effects on women's lives (Amorim-Maia *et al* 2022, Bhavnani *et al* 2019, Martínez-Alier 2023, Sultana 2022a, 2025). These include the structural exclusion of poor women from decision-making processes about energy transitions (Ryder 2018), gendered repression of anti-mining activism (Deonandan and Bell 2019), increasing domestic violence in areas where fossil fuel extraction is phased out (Lahiri-Dutt 2023) and the embodied 'hidden and distant injustices (upstream or downstream) arising from extraction' (Healy *et al* 2019).

Taking the multi-layered and context specific gendered impacts of extractivism seriously is all the more important since some forms of extractivism are set to continue and even accelerate in transitions towards renewable energy systems (Abram *et al* 2022, Brown *et al* 2024, Tunn *et al* 2024). Just Transition frameworks often rely on the development of new large-scale infrastructures which require vast tracts of land to be converted into solar farms, wind parks and attendant transmission towers, access roads and storage facilities, in addition to the lithium mines and other extraction-intensive minerals required for the construction of completely new systems of energy production and consumption (see Sokona *et al* 2023, Velasco-Herrejón *et al* 2022). Such high demands

for minerals, land and water have been called 'green extractivism' (Dunlap and Riquito 2023). Critical accounts of extractivism's gendered impacts are particularly important in countries across the Global South where agendas of economic development and the creation of formal employment opportunities are in tension with concerns for the health and functioning of ecosystems that are necessary for local livelihoods (Mbeva 2023, Okereke and Ehresman 2015).

This raises the question, what insights can be gained from critical analyses of the gendered impact of extractivism for the challenges Just Transition frameworks are likely to face? In other words, given that some existing gendered socio-economic challenges are likely to continue in Just Transitions relying on extensive energy developments, what lessons can be drawn from an analysis of the intersecting injustices and power asymmetries produced by today's extractivism for future Just Transitions?

This contribution addresses these questions through a critical analysis of gendered impacts across three sites of extractivism, or 'extractive zones' (Gómez-Barris 2017) in Uganda. The three sites under scrutiny are (1) Karamoja, where the Karamajong are battling with the gendered impacts of intensified extraction of gold, timber and other minerals, (2) Mabira Forest, where cutting large parts of the forest to make space for a sugar cane plantation was averted by popular protests; and (3) EACOP, a 1443 km oil pipeline from Lake Albert to the Tanzanian Coast, where thousands of people face eviction and gendered dispossession.

Uganda exemplifies key challenges around resource extraction and its socio-ecological impacts. The East African country has been called both 'one of the region's newest petro-states' (Olanya 2015) and a 'frontier' of the green transition (Smith *et al* 2022). Increasing oil exploration and industrial development are in tension with the preservation of the environments necessary for people's survival (Ampaire *et al* 2017, Lwasa *et al* 2019, Ogwang *et al* 2018, Ogwang and Vanclay 2021). In collaboration with multinational corporations, the Ugandan government seeks to exploit its significant oil resources by building one of the largest fossil-fuel infrastructures in the world, the East African Crude Oil Pipeline (EACOP). In addition, some of Uganda's rich deposit of precious metals such as gold, copper, cobalt and other minerals are in high demand for renewable energy production (Gore 2017, Smith *et al* 2022). The climate crisis has already disrupted rain patterns leading to food insecurity and increasing famines, particularly in the North-Eastern region of Karamoja (Serwajja and Mukwaya 2021). These intersecting social, economic, political and ecological challenges make Uganda a particularly interesting case to scrutinise extractivism's gendered impacts and what this means for the challenges a Just Transition might face.

Methodologically, the paper draws on semi-structured interviews and focus groups with Ugandan activists and community members working in the fields of environment, social justice and gender equality. While these perspectives are not representative of Ugandan society, these people's deep local engagements allow us to understand the systemic and frequently hidden gendered impacts of extractivism (see Krüger *et al* 2022, Purvis *et al* 2025, Smith and Patterson 2019). The empirical analysis is complemented with results from existing studies. Across the case studies, three major gendered impacts are identified, namely violence, barred access to basic necessities and dispossession of land. The final part of the paper discusses possible lessons from these findings for Just Transitions.

2. Gender, extractivism and Just Transitions

The well-established literature on climate justice, women, and extractive industries has demonstrated that different forms of resource extraction can lead to greater gender inequalities (Baum and Benshaul-Tolonen 2021, Cielo and Coba 2018, Harcourt *et al* 2023, Newell *et al* 2021, Seck and Simons 2019). Such approaches have made significant advancements in understanding the various roles of women both as being affected by the impacts of extractive industries and actively choosing to participate in the economic and social opportunities that for instance becoming a mine worker promises (Macdonald 2018). A review on the gendered impact of both large-scale industrial and small-scale artisanal mining lists as frequent effects the displacement of women due to mining activities, environmental degradation of water, air and land used by women for agricultural food production, reproductive health vulnerability due to environmental contamination, mental health issues, an overall lack of power and agency in decision-making within and about extractive industries, and increased risk of violence against women by male workers and police, security and military personnel deployed in extractive zones (Jenkins 2014). Healy *et al* (2019) show how fossil fuel extraction and the respective supply chains can cause 'transboundary harms', including physical attacks against environmental defenders and slow violence through the contamination of water and farmland. Women engaged in salt-mining at Lake Katwe in Uganda work without protective gear often in the direct sun and extremely high temperatures while being at risk of brine exposure, a toxic mixture of corrosive chemicals such as ammonia and hydrogen dioxide that are part of the mining process (NAPE, n.d.).

However, critical scholars of resource extraction have argued that we need to go even further beyond the focus on equality and the most immediate impacts

and explore more intersectional approaches to systemic injustices, structural violence and women's resistance (Caretta *et al* 2020, 2024, Fernandes 2024, Sempértegui 2021). This work is particularly pertinent on the African continent, which Pereira and Tsikata call 'the epicentre of extractivism' (Pereira and Tsikata 2021, p 16, see Finkeldey 2022, WoMin 2013, Ye *et al* 2020).

In sum, the critical literature on the gendered impacts of extractivism demonstrates that first, extractivism frequently has gendered impacts in fields such as labour, health, ecology, reproduction, decision-making, land and food security, which affects the core of people's livelihoods, well-being and survival. Second, it shows how intersectional and decolonial perspectives are particularly well situated to interrogate systemic injustices taking into account intersecting axes of oppression from local to planetary scales.

These critical investigations of extractivism's gendered impacts are also of vital importance to Just Transition frameworks since these frequently imply profound changes to existing extractive regimes while often requiring the establishment of new economies of resource extraction. There exists a vibrant field of scholarship advocating for gender-sensitive perspectives in Just Transitions (Allwood 2020, Lieu *et al* 2020, Mohr 2021, Walk *et al* 2021, Walk 2024). However, gender is still frequently neglected in mainstream Just Transition debates (Brown and Spiegel 2019, Johnson *et al* 2020, Muttitt and Kartha 2020, Perri *et al* 2024). For example, gender is not mentioned in a recent review on Just Transition meanings (Stark *et al* 2023), and it is only referenced in passing in a review on critical minerals and Just Transitions (Brown *et al* 2024) and an integrative proposal for Just Transition approaches (McCauley and Heffron 2018). Where gender is mentioned, it is often only one among many categories of inequality. This means that more radical decolonial feminist critiques centring power relations, structural violence and interlocking systems of oppression are not adequately explored (Bassel and Emejulu 2017, Bhambra and Newell 2023, Collins 1991, Hooks 1984, Mohanty 2003, Sultana 2022b). Pereira and Tsikata argue that the 'gender-blind approach' adopted in much of the transition literature on Africa ignores 'the varied manifestations of exploitation and sexual violence that women often face' (Pereira and Tsikata 2021, p 20).

This contribution employs a critical feminist lens to interrogate three zones of extraction in Uganda and the gendered impacts of extraction in the socio-economic status quo and discusses what this might mean for Just Transitions, where some forms of extractivism are likely to continue or even be intensified. 'Extractive zones' of fossil fuels and other minerals are a useful entry point for such intersectional feminist inquiries. According to Gómez-Barris (2017, p xvi–xv), extractive zones are places where, informed by 'colonial paradigm, worldview and technologies', an economic system 'engages in thefts, borrowings, and forced removals, violently reorganizing social life as well as the land' affecting particularly local and indigenous peoples (see David-Chavez and Gavin 2018, Galeano 1974, Gudynas 2010). Extractive zones share many characteristics with 'sacrifice zones' such as racialised environmental and health impacts (Lerner 2012, Scott 2010, Scott and Smith 2017). However, the extractive zone concept brings into sharper focus (post)colonial relations, capitalist accumulation and appropriation of territories.

Like many countries across the Global South, Uganda is officially committed to a transition to renewable energies while pursuing a development model that is based on the expansion of mining, oil production and large-scale extractive infrastructure. Following the 2012 Cancún Agreement, the government developed the Uganda National Climate Change Policy (Ministry of Water and Environment 2015) and more recently, the Uganda Energy Transition Plan (IEA 2023). Both policies try to balance the trade-offs between the 'low carbon development' of a renewable energy transition, fair energy access and economic opportunities (Lwasa *et al* 2019, p 160; see Fashina *et al* 2018, Sundararajan *et al* 2022). However, these policies have been criticised for pursuing a development path that 'is potentially a process of pursuing maladaptation', especially for local communities that strongly depend on the stability of local socio-ecological systems such as the Karamajong in the rural Northeast of the country (Lwasa *et al* 2019, p 162). There also exists a 'developmentalist coalition' between the Ugandan government and international mining and fossil fuel companies that continue to expand exploitation of its vast oil reserves including the $3.5 billion EACOP (Hickey and Izama 2016, 179; see Bogrand *et al* 2020, Carmody and Taylor 2016, Olanya 2014;). The context in which a Just Transition in Uganda might take place therefore means to deal with frequently conflicting imperatives of resource extraction, subsistence and 'green' developmentalism (see Branch and Martiniello 2018, Hill *et al* 2021, Isgren and Ness 2017, Ogwang and Vanclay 2021).

3. Methods

This paper presents findings from a comparative study of Ugandan activists and extraction affected communities by combining interviews, ethnography, and secondary literature. The author conducted two months of ethnographic fieldwork with activists in February, March and August 2022, in Kampala, Karamoja and the Western Nile regions. Working with activists and grassroots communities has been identified as an important perspective in understanding extractivism and climate

injustices (Hess 2019, Newell and Mulvaney 2013, Phillips *et al* 2022, Schlosberg and Carruthers 2010, Shelton and Eakin 2022, Rainnie and Snell 2024) and to overcome stereotypes, centre local agency and scrutinise structural injustices (Collins 1991, Mamdani *et al* 1988, Otlhogile and Shirley 2023, Raj *et al* 2022, Schlosberg and Craven 2019, Temper *et al* 2018, 2020). This is particularly true in many formerly colonised countries where a small, wealthy elite enjoys overwhelming control over territory and productive assets (Galeano 1974, Okoth 2023, Rodney 1972), including in Uganda (Mamdani 1975, 1986, 1996, Ojambo 2023, Wilkins and Vokes 2023).

Interlocutors were recruited primarily by contacting different activist organisations working on extractivism and climate justice via their social media accounts such as Extinction Rebellion Uganda (XRUG). At the time of the research, XRUG were one of the most active Ugandan groups working on ecological and social justice concerns, combining grassroots engagement with advocacy at the national level. Through snowball sampling, I connected with other grassroots activists working on environment related issues. The author interviewed a total of 18 activists, nine linked to XRUG and nine working with other grassroots groups, and conducted five informal focus group conversations. While XR originated in the UK, many activists around the world started to organise under the same name with very different sets of perspectives as studies on Gambia, Nigeria, South Africa and transnational alliances show (Gardner *et al* 2022, 2023, 2024; Müller 2024, Müller and Cochrane 2024). Ugandan XR activists agreed with some of the movement's overall concerns such as climate justice; however, they rejected the idea of importing Global North strategies. Instead of engaging in civil disobedience, as European activists asked them to do, the Ugandan national strategy was primarily based on awareness raising and practical work with local communities including events that focused on water access, clean-ups and food supply for famine and flood-affected communities (Nabirye 2024, Wakula 2022, XRNow! n.d.).

In addition, five informal focus group conversations were conducted to capture a diverse range of perspectives from the activist groups and the communities they worked with. The activists suggested, organised and facilitated the conversations as part of their own engagement and relationship building with these groups in Kampala and Karamoja. In each focus group, the author was first introduced by the activists who had convened the group and who had received written information about the project. To ensure free, prior and informed consent, the interlocutors explained the research project to the group in accessible language, after which the author introduced themselves, explained the objectives of the project, ensured anonymity and opened the space for any questions and critique. Subsequently, the author asked for consent from all the participants, offering the possibility to withdraw from the research at any time.

Three focus groups were conducted in Kampala, one with activists from a neighbourhood-based social justice centre, one with a group of anti-dictatorship activists and one with a women's group in an informal settlement that the activists regularly worked with. Two focus groups were organised in Karamoja, one with a group of environmental activists working in the region and one with a women's group in a village where one of the local activists was based. The focus groups had 4–7 participants each and collected views about the ecological, social, economic and political challenges that people were encountering.

More information on the methodological approach and a list of interviewees and focus groups can be found in appendix A. To enable readers to directly engage with the writings of different grassroots actors, including some of my interlocutors, a list of resources can be found in appendix B.

4. Case studies: mining in Karamoja, plantations in Mabira Forest and EACOP

Three case studies of extractive zones form the basis for the following systematic analysis of extractivism's gendered impacts.

Karamoja: the North-Eastern region of Karamoja is a 'semi-nomadic pastoralist region (which) is increasingly prone to climate extremes', leading to frequent droughts and famine (Okiror 2016; see Mugeere *et al* 2021, UNDP 2022). These have been exacerbated by the 'colonial … exploitation of the people of Karamoja, an exploitation that systematically destroyed not only the very basis of a pastoral way of life but also hampered the transition to an agricultural mode of existence' (Mamdani 1982, p 66). Karamoja has significant natural resources such as gold, limestone and marble, but also copper and cobalt, which are in very high demand because they are 'critical minerals in clean energy transitions' (IEA 2022). Around 20,000 Karamajong are involved in the mining of these minerals, providing significant economic opportunities but also causing pollution of water sources, exposure to toxic chemicals like mercury, and fuelling armed conflict over resource control (Serwajja and Mukwaya 2021, p 91).

Mabira Forest: in 2007, the government of President Yoweri Museveni proposed to remove the protected status of Mabira Forest Reserve, one of the country's last remaining rainforests, by degazetting it and having around one-fourth of the forest cleared to establish a sugar cane plantation. The plantation was spearheaded by Sugar Corporation of Uganda Limited, which is jointly owned by the Ugandan Government and the Indian business conglomerate Mehta Group via Kakira Sugar Works.

As such, it is part of the labour and ecological extractivism that began under British colonialism and continues to shape the Ugandan economy today (Lyons and Westoby 2014, Ojambo 2023, p 57). However, the government's plan was met with significant resistance by various civil society groups and prompted a series of major demonstrations dubbed the 'Mabira riots' (Hönig 2014, p 69) and 'Mabira crusade' (Olanya 2014, p 86). These were considered 'the largest street protests ever held in Uganda', turning Mabira Forest into an 'iconic symbol' for a broader range of discontent with Museveni's autocratic regime (Child 2009, p 241). Beatrice Anywar, woman MP for Kitgum, often referred to as 'Mama Mabira' and a leading organiser in the Save Mabira Campaign, explained that they tried to protect the forest due to its 'tourist value and influence on rainfall patterns to the benefit of agricultural activities in the region' (Baligira 2020, p 84). The protests managed to push an authoritarian president to take back a major extractive development project that he had publicly advocated for (Curtice and Behlendorf 2021, Kakuba 2021).

EACOP: EACOP, projected to run from from the Albertine Graben region in Uganda to the Tanzanian Port of Tanga, is among the most widely known and contested fossil fuel developments on the African continent (Hill *et al* 2021, Ogwang *et al* 2018, Smith *et al* 2022). EACOP stakeholders Total Energies, the Uganda National Oil Company, the Tanzania Petroleum Development Corporation and the China National Offshore Oil Corporation (Ogwang and Vanclay 2021) argue that the pipeline has the potential to create thousands of jobs and to address 'the diverse needs of countries in the Global South still combating the pervasive challenges of energy poverty', as an official of the Petroleum Authority of Uganda puts it (Ssekatawa 2023; see Hill *et al* 2021). On the other hand, a variety of national and international environmental, human rights, feminist and local community organisations have criticised increasing emissions, lack of compensation and damage to local communities in Hoima and the Lake Albert region (Ogwang and Vanclay 2019, Okot 2023, Smith *et al* 2022, Wilmot 2024).

5. Analysis: the gendered dimensions of extractivism's intersecting injustices and power asymmetries

5.1. Gendered violence

The first dimension through which extractivism produces intersecting gendered injustices across the case studies is by creating the conditions for an intensification of gender-based violence. It is not only the social dynamics around a mine or an oil pipeline that produce systemic gendered vulnerabilities. Extractivism does not take place in a vacuum and hence cannot be isolated from the historical and contextual factors that make up local and regional gendered political economies. In Karamoja, the competition between small-scale artisanal mining and charcoal production as well as the expansion of industrial extraction of new resources in a zone marked by (post)colonial histories of insecurity and cross-border conflict massively aggravate gendered impacts. Charcoal production-induced deforestation and climate change-induced water scarcity mean that water needs to be sourced many miles from the home (see Branch and Martiniello 2018, Nabirye 2024, p 189). This means that women and girls are increasingly targeted, as Esther, a women's rights activist working with the Karamajong explains:

> 'Girls … and women actually are the ones who fetch water in Uganda. They move … one and a half to two kilometres to fetch water … and the *boda* [motorcycle taxi] guy says, you don't need to carry this water. I can carry for you. … The next thing is either, 'I carried for you water, so if you don't want to give me freely, I am raping you or I am defiling you', at this young age … So in a way climate change is a big thing when you go deeper to understand; if there was enough rain maybe these people would have had harvested water' (UG10).

This drastic account shows how the nexus of charcoal production, mining, deforestation and climate change-induced water shortages increasingly exposes women and girls to male violence (see Ilukol 2022a).

The effects of EACOP related compensation payments provide another example of how the socio-economic dynamics in an extractive zone can create conditions for increased gender-based violence. 'Oil and gas can also cause gender-based violence', as feminist activist Esther argues. Several of my interlocutors working on EACOP, but also in Karamoja, told me that since it is usually men who hold the legal title of the land, only they receive compensation payments by the multinational companies in exchange for being evicted from their homeland. Many men take this money, move to the city, marry another woman, and leave their family in destitution. The abandoned women, girls and boys neither have land to sustain themselves nor access to the compensation payment. This pushes women and girls into depending on other sources of income, with often very dangerous implications. These include precarious and poorly paid sex work, as Khadija, a doctor running a centre for survivors of gender-based violence in Kampala, told me, confirming earlier studies (UG18; see Bogrand *et al* 2020). Even EACOP's own Environmental and Social Impact Assessment acknowledges that commercial sex work has increased in its area of operation. However, it fails to address the

resulting physical insecurity for women and girls, the intensified spread of sexually transmitted diseases and drastic deterioration of gender equality in the household which frequently includes an increase in intimate partner violence (Hill *et al* 2021, pp 235–236).

5.2. Gendered access to basic necessities

In addition to exacerbating conditions of direct physical assault, other forms of gendered structural violence such as barred access to basic necessities proliferated in the case studies. Ilukol (2022b) shows that many Karamajong women are responsible for the provision of basic necessities, especially food, which involves fetching water and collecting the firewood necessary for cooking (see Busingye 2011, Murphy *et al* 2017, p 692). Karamoja's mining boom and its toxic tailings further exacerbate water shortages, as environmental activist Ibrahim explains:

> 'The (mining) activity has caused too the cutting down of trees. Now they have cut down the trees and they have also cleared the vegetation cover of the land there, which has caused it to climate change, leading to that drought … Even the waters there … have been contaminated by the chemicals that they use during the mining activity. So people there, even when they are trying to use that water for showering it has got to some effects on their skin. …. So if it can affect the skin by just using it for bathing, what of when you take it for drinking? It can never be safe' (UG11).

This account confirms earlier studies on how the Karamojan mines cause large-scale ecological destruction, including cyanide and mercury pollution of pastures and water bodies (Serwajja and Mukwaya 2021, p 92). It is mostly women having to choose between using toxic water or having no water at all, which not only exacerbates the frequent famines but also poses particularly high risks related to menstrual hygiene.

The economic benefits from small scale mining are also deeply gendered. It is usually men who work in Karamojan mines far away from the villages, and men who control the exchange of gold into money and access to land, which is a key arbiter of survival, as Esther explained (see Mamdani 1982, Murphy *et al* 2017, Serwajja and Mukwaya 2021). This is further exacerbated by government restrictions on the remaining pastoral land for mining developments, including for the very minerals needed for renewable energy production (see Ilukol 2022b, p 50). This in turn has a disproportional effect on women and girls whose means of subsistence are drastically restricted.

While Mabira Forest Reserve is not designated for agricultural use, its economic significance for local communities is immense, particularly as a source of firewood and plants used in traditional medicine (Truscott 2023). Since men are more likely to move to the cities, work in forests and the surrounding farms is increasingly done by women (Mulugo *et al* 2020). Economic pressures such as paying school fees and obtaining medical services also mean that local farmers increasingly expand activities into the forest itself. Mabira Forest's vital role for the livelihood of its neighbouring communities is key to understanding the fierce protests staged against the government's development plans. It also helps to understand why the region's MP for women fronted the protests against what was perceived as a foreign investor. Ibrahim, one of the activists participating in the protests, recounted the events as follows:

> 'Tyres were burned, streets were crowded. Then the investor who had [been] given the forest, his business also was threatened … His sugar was boycotted. And those [shops] who had the sugar … they had also to, like, throw it out to show that we are no longer associating with you … [people were] not allowing any Kakira sugar works vehicle traveling on our roads' (UG10).

This account demonstrates the diverse tactics used by activists through which they resisted a perceived incursion of an extractive industry, indicated by using the phrase 'our roads'. In a more recent campaign to protect Bugoma Forest from being turned into a plantation, women held placards reading 'My forest—my medicine—my life' (New Vision n.d.), indicating the inextricable link between body, territory and survival. The activists I talked to very clearly pointed out the complicity of the Ugandan government in the intensification of extractivism through their collaborations with 'investors'. As Ochieng put it, 'Mostly it is not Africans who destroy the original forests, it is the junta with the help of investors' (UG15). This shows that there exists considerable scepticism towards the government to deliver any large-scale economic project as they are perceived to be complicit in the destruction of the eco-systems vital for women's provision of basic necessities.

5.3. Gendered dispossession of land

The planned sugar cane plantation in Mabira Forest, the Karamojan mines and EACOP imply the transformation of land used for subsistence farming, whether privately or government owned, into industrial zones of extraction. This leads to dispossession of land, which in the case of EACOP includes evictions of whole communities (Ogwang and Vanclay 2021, p 6; see Bogrand *et al* 2020), with highly gendered consequences. Esther explains the nexus of fossil fuel

development and patriarchal ownership structures as follows:

> '85% of land in Uganda, at household level, is owned by men. … So the man has full responsibility and full ownership … But in this scenario, this woman is going to be using this land, and because she does not control it, she only has access, and she does not own it. So [Benjamin] sells the land the way you want, but tomorrow, this is the only hope that I have. It is the rainy season, and I want to go and plant beans for the household. I find Shell constructing, you know? I find Shell constructing!' (UG10).

This perspective echoes previous studies on how male-dominated property ownership structures intersect with EACOP-related land acquisition by international corporations with devastating consequences for women's lives (Bogrand *et al* 2020, Busingye 2019, Ogwang *et al* 2018, Ogwang and Vanclay 2021, NAPE n.d.). This also shows that rather than focusing on the impact of projected carbon emissions, activists' concerns centred on the effects on local communities. Many interlocutors argued that the primary issue with EACOP was not that it would drastically expedite oil production, but that it was a large-scale development project that destroyed people's livelihoods. As journalist activist James put it,

> 'the oil activities in that Albertine region in western Uganda … have led to a large influx of, you know, destitute people moving around … They depended on fishing as a source of food and a source of livelihood. … They also had land where they cultivated and had a constant supply of food. And then guess what? The oil companies come and evict them in thousands … which poses a threat to food security in that entire region' (UG14).

Despite these concerns, the Ugandan activists I interviewed were often ambiguous about EACOP. They argued that since large amounts of Uganda's strained public budget had already been spent on the project, they hoped to see some returns rather than it turning into a sunk cost. As James put it: 'there has been a very heavy investment, and our country is in need, that bit of, you know, money. So you cannot reverse that' (UG14).

Environmental activist Jonathan criticised the one-dimensional view of international environmental organisations, arguing that there is a 'disconnect between North and Global South … you have been mining (fossil fuels) for decades' (UG7). He pointed out the hypocrisy of European climate movements asking Ugandans to protest mining and oil pipelines while they had been benefitting from oil exploration for centuries and their banks financed the pipeline. In a situation where inflation and rising fuel prices due to geopolitical tensions and the deleterious impacts of climate change caused primarily by carbon emissions from the industrialised North lead to food insecurity and is threatening the very survival particularly of women, even some environmental activists I talked to consider the negative effects of oil exploration worth the anticipated benefits.

6. Conclusion: insights for Just Transitions

Following Lahiri-Dutt's (2023) call for feminist perspectives on Just Transitions, this contribution concludes by sketching what lessons can be drawn from the analysis presented here.

First, the findings point to the similarities between the structural injustices caused by fossil fuel and other forms of extractivism such as sugar, timber, gold, lithium and other allegedly 'green' resources, confirming earlier studies (see Dunlap *et al* 2024). While reducing carbon emissions is key for Just Transitions, this is only one dimension of the interconnected impacts of socio-economic transformations and the concomitant changes in labour, land and subsistence practices (see Greiner 2022). Areas rich in resources needed for renewable energy production such as Karamoja are likely to see a rapid expansion of extractive projects. Just Transitions need to take into account the upstream injustices inherent in the extraction of metals for 'green' energies including barred access to basic necessities such as water and subsistence farmland. Even where an overall reduction of extractivism is achieved, Just Transition and alternative models such as just circular economy transition and just rural transition need to reckon with anticipated job losses in countries dependent on primary resource exports and 'linear industries' such as mining beyond the concern with phasing out fossil fuels (Just Rural Transition 2021, Schröder 2020, pp 5, 13; see Otlhogile and Shirley 2023). Rather than only focusing on the transformation of waged labour, the complex interactions of extractivism, subsistence economies, care work, gender hierarchies and the resulting power asymmetries need to be properly engaged with by mainstream approaches to Just Transitions (Markard *et al* 2020, McCauley and Heffron 2018, Pinker 2020).

Second, the intimate connections between dispossession of land, water pollution, food insecurity and the physical integrity of women's bodies show that it is impossible to fully understand structurally embedded injustices of resource extraction without making gender a primary analytical and normative concern. The socio-economic upheaval that the

establishment of a new plantation, mine or pipeline can cause necessarily interacts with and frequently exacerbates existing gendered asymmetries in local communities. The three case studies show that when communities are being evicted, access to communally used forests is restricted, or large lump-sum payments are made to households, the socio-economic effects are aggravated by inequalities in existing gendered property regimes and patterns of labour division. The injustices documented above do not stem from a single source or dimension alone. They are structurally embedded in local ecologies shaped by the availability of water, land and trees, by local traditions around gender relations and social expectations, and by histories of colonialism and the attendant interventions of international capital. For Just Transitions to avoid exacerbating these existing structural injustices, a careful investigation of multidimensional vulnerabilities, structural violence and socio-ecological relations is vital. This provides further evidence for the argument that a transition without comprehensive gender justice cannot be just (Lahiri-Dutt 2023, Pereira and Tsikata 2021, Terry 2009).

Third, equality-centred feminist perspectives in Just Transition scholarship are insufficient to capture the complexities in which social, economic, ecological and political dimensions intersect to cause structural injustices. While equality is of course a key dimension for achieving justice, it needs to be complemented by insights from decolonial and intersectional feminist perspectives. These approaches are vital to understand how different elements of discrimination and oppression, such as class differentials, property regimes, division of labour, toxic environments and care responsibilities analysed above are not just dimensions that can be thought of as 'adding up' (Collins 1991; Hooks 1984). Instead, they produce situations that are qualitatively different, as for instance the male-only compensation practices leading to exposure to violence in sex work shows, where economic, gendered and ecological factors together produce highly dangerous situations. The Mabira Forest protests also show why women's agency in opposing dispossession of land and access to basic necessities is key to avoid the trap of casting women in the Global South only as vulnerable population, as decolonial feminists have pointed out (Mohanty 2003, Sempértegui 2021). Rather, the protests highlight the various ways in which they resist, adapt to and shape socio-economic transformation processes, which needs to be a key consideration for Just Transition scholarship.

To avoid being vulnerable to reproducing the structural injustices discussed here, especially mainstream Just Transition scholarship would benefit from taking these lessons to heart, engaging more deeply with research on extractivism, gender, dispossession and resistance, and expand its analytical instrumentarium through feminist and decolonial approaches. Attending to forms of grassroots agency and women's worldmaking in the midst of ecological and economic upheaval is an urgent task for scholars who are serious about learning how other Just Transitions are possible.

Data availability statement

The data cannot be made publicly available upon publication because they contain sensitive personal information. The data that support the findings of this study are available upon reasonable request from the authors.

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Appendix A. Additional methodological information and list of interviewees

The interviews in Uganda took place in person except one, they were fully audio recorded and fully transcribed. The interviews were mostly conducted in English, except in Karamoja, where the interviews were conducted in Karamajong, enabled through translation by a research assistant who is a native Karamajong speaker. All interviews and interactions with research participants were undertaken under the ethical research guidance of the author's institutions, receiving ethical approval from the respective ethics review boards and complying with the Declaration of Helsinki.

Conducting this research as a white European man, the process was inevitably shaped by asymmetrical racialised, economic and gendered power

List of interviews and focus groups conducted in Uganda

Interviews	Date	Gender	Organisation	Location
UG1	9 February 2022	F	XR Uganda	Kampala
UG2	11 February 2022, 26 February 2022	M	XR Great Lakes	Jinja
UG3	28 February2022	M	XR Uganda	Kampala
UG4	1 March 2022	M	XR Uganda	Kampala
UG5	16 August 2022	F	XR Iganga	Mbale
UG6	16 August 2022	M	XR Uganda	Mbale
UG7	21 August 2022	M	XR Uganda	Kampala
UG8	21 August 2022	M	XR Uganda	Kampala
UG9	22 August 2022	M	XR Uganda	Kampala
UG10	19 August 2022	F	Women's organisation	Kampala
UG11	8 August 2022	M	Social justice organisation	Kampala
UG12	16 August 2022	F	Human rights community activist	Napak, Karamoja
UG13	16 August 2022	M	Local community elder	Napak, Karamoja
UG14	22 August 2022	M	Journalist activist	Kampala
UG15	19 August 2022	M	Anti-dictatorship collective	Kampala
UG16	12 August 2022	F	Social justice organisation	Kampala
UG17	08 August 2022	M	Human rights organisation	Kampala
UG18	12 August 2022	F	Women's health organisation	Kampala
Focus groups				
F1	28 February 2022	Women only	Women's group in eastern Kampala	Kampala
F2	12 August 2022	Mixed	Social Justice organisation	Kampala
F3	19 August 2022	Mixed	Anti-dictatorship group	Kampala
F4	16 August 2022	Mixed	Environmental activists	Napak, Karamoja
F5	16 August 2022	Women only	Women's group in Napak village	Napak, Karamoja

dynamics. These asymmetries cannot be fully resolved, as work on decolonial research methodologies working with activists shows (Kessi *et al* 2021, Smith 2021, Woodly 2022). Drawing on these critical methodological interventions, I tried to mitigate these asymmetries through measures I co-developed with my interlocutors during four years of field research with activists across the Global South. These measures included building long-term relationships with local activists, taking them seriously as knowledge producers in their own right, and receiving their feedback, criticism and input throughout all stages of the project (see Arribas Lozano 2022). I sought to enhance epistemological participation in the research process by developing my research questions and objectives in collaboration with my interlocutors and only working with communities where they had established long-term working relationships. Following the data gathering phase, I regularly engaged with my interlocutors in critical reflection on the interpretation of the research findings during the analysis and writing up stages. Finally, the research project aims at building relations of reciprocity through the sharing of knowledge and, where appropriate, resources; for example, I shared communiqués and fundraising requests of my interlocutors with my networks, and provided financial compensation for any costs incurred in relation to the research project, including transportation, taking time off work and caring commitments.

While the data used in this article comes from my Ugandan fieldwork, the author also conducted two months of ethnographic fieldwork and 19 interviews with activists in Kenya in 2022, which provided a comparative perspective on a neighbouring East African country. In the interpretation of data, I drew on conceptual tools of feminist critiques of political economies of extractivism in Africa (Pereira and Tsikata 2021, 16, 20; see Luckett 2023, WoMin 2013), complemented by insights from my interlocutors and a range of Ugandan scholars

(Baligira 2020, Busingye 2011, 2019, Elasu *et al* 2023, Fashina *et al* 2018, Kakuba 2021, Ilukol 2022a, 2022b, Lwasa *et al* 2019, Mamdani 1975, 1986, 1993, Mamdani *et al* 1988, Mugeere *et al* 2021, Nabirye 2024, Ogwang *et al* 2018, Ojambo 2023, Olanya 2014, Serwajja and Mukwaya 2021, Ssenkaaba 2015).

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