Recurrent Frontiers: Land Dispossession, Illegal Resource Extraction and Environmental Degradation in Sorong, West Papua

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Abstract

Over the past decade, during the tenure of President Joko Widodo, West Papua has undergone a process that Jason and Michael (2019) describe as a "recurring frontier", whereby frontiers emerge, evolve and are continually redefined. The situation there is exemplified by a number of intertwined "frontier indicators", which in this article are focused on military threats, the corrupt bureaucracy surrounding infrastructure and the environmental disasters of deforestation and flooding. The paper is based on reflections from fieldwork in Sorong greater area (Sorong Raya) between 2019 and 2023. It indicates several developments occurring at the micro level in Sorong including the history of threats and violence that have created frontiers and overlapping bureaucratic governance, resulting in urban environmental degradation. The creation of frontiers for Papuans is not only currently underway but is also envisioned as a future project to be developed across Papua. Reflecting on this specific case in Sorong, West Papua, it is anticipated that frontier areas will emerge throughout Papua in the future.

Keywords: West Papua, Sorong City, frontier, land dispossession, illegal logging, sand mining, governance, corruption, environmental degradation, floods

Over the past ten years, the Indonesian province of West Papua has been subjected to a policy of frontier treatment under the presidency of Joko "Jokowi" Widodo. It seems likely that the frontier condition will also be continued under the next government of President Prabowo as well. This paper reflects on how West Papua has become a frontier area under the Jokowi government and how this frontierisation impacts on both settlers and West Papuan indigenous communities, as well as on the wider ecological environment.

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This study aims to examine the application of the concept of "frontierisation" as a verb in Sorong, West Papua, and to evaluate its future implementation throughout Papua. Additionally, I am interested in understanding the indicators of frontiers, given that the concept itself is too ambiguous for practical use in Sorong. With this aim and to explore the concept of the frontier in West Papua in greater depth, I have used three key indicators of frontiers: military threat and violence, complex bureaucratic systems and natural resource depletion. Each of these indicators is discussed in a separate subsection, forming the structure of the article.

This paper is based on fieldwork conducted in Sorong from December 2019 onwards. The research project focused on West Papua and, in particular, on urban infrastructure development and its impact on both the local ecology and population. I interviewed civil servants responsible for managing physical infrastructure and environmental development, including officials from the Regional Development Planning Agency (Bappeda), the City Planning Office and the Forestry and Environment Agency. I also interviewed NGO activists concerned with human rights and environmental issues. Additionally, I undertook multiple visits to the hills that were being exploited for illegal sand quarry activities, accompanied by my interlocutors. During these visits, I engaged in conversations with settlers employed in the sand quarry operations, local residents living in the vicinity of the hills and the indigenous Moi people, who are the landowners and also work in the quarry. To assess the impact of this illegal sand quarry activity, I interacted with and observed individuals affected by mud floods resulting from the sand quarry, particularly during the rainy seasons.

My research encountered a setback due to the Covid-19 pandemic, which harshly affected Indonesia from early 2020 to the end of 2021. After the pandemic subsided, I resumed my research activities in January 2022. My position as a male researcher from outside Papua meant that this research had limitations. Firstly, I met more men than women as interlocutors during my research. Secondly, my status as a non-Papuan made me hesitant to attempt to represent the voices of indigenous Papuans, as I might be representing them in a misleading way. This did not preclude me from sympathising with the Papuans and their natural environment, however. Thus I opted for a different approach, with the objective of uncovering the methods of frontierisation employed by the Indonesian state to exert its power in the region, including sending in colonial settlers, allowing military operations and creating overlapping bureaucratic regulations. These actions have led not only to the dispossession of Papuans and the deforestation of their homeland but also to environmental disasters.

Research in political science and human rights on Papua tends to adopt a macro-level perspective, zooming out to consider what is happening in Papua in general. This approach risks relying on complex terminology – such as oligarchy, neoliberalism, capitalism and development – which is often employed

to describe the situation in Papua without providing concrete examples. By focusing on a specific location, I aim to provide critical insights into broader social and cultural phenomena. Through an in-depth examination of the local contexts, I can draw broader conclusions about the various cultural, social and political-economic frontier issues that are currently emerging throughout Papua. Anthropological approaches acknowledge that cultures and societies are interconnected rather than isolated, and that changes or issues in seemingly small places can have significant implications on a larger scale (Eriksen 2015).

Frontiers and fronterisation

My study therefore depicts concrete examples of how investors, security forces and local politics operate in Papua through the lens of frontierisation. This approach prioritises the examination of specific instances, with a view to elucidating the broader trends that have shaped and may continue to shape the situation in the country. Danilyn Rutherford (2003) highlights the nuanced concept of the frontier in Papua, exploring the interplay of nationalism and millenarian movements in West Papua. She frames the frontier zone as one marked by contested national and local identities, where indigenous Papuans are in constant negotiation with external influences. This dynamic often leads to violence and human rights abuses against Papuans (Giay 2000).

Previous works on Papua have described the clash of frontier ideologies, particularly in the context of demands for sovereignty. However, my research shifts focus to examine how the concept of the frontier has impacted the environment. This question arises from the observation that many studies on Papua emphasise ideological and identity issues, often overlooking the material basis of these conflicts. I argue that the loss of identity and the deprivation stem from environmental degradation – the loss of land, forests and animals – and that this interpretation offers a more concrete depiction of frontier collisions that, in turn, influence ideology.

The operation of frontiers in a given area requires "assemblages", a complex interplay of overlapping rules and multiple interventions that organise bureaucracy, land, people and nature. These assemblages often lead to unpredictable outcomes for both residents and those in authority. Frequently, the overlapping rules create coherent systems of extraction, exploitation and opportunity. However, at other times, they conflict with and benefit one another. In frontier areas, these contingent configurations should not be understood as fixed or predictable (Cons / Elienberg 2019). Due to the fluid nature of laws in frontier areas, many rules that operate remain invisible within formal legal frameworks.

In classic terms, Anna Tsing (2011) defines the frontier as a scenario where the principles of free trade and individualisation bring about substantial changes in the ecological landscape, creating tensions among settlers who dispossess or subordinate native communities, ultimately leading to the establishment of a new social order. A frontier region, meanwhile, can be defined as an area that is distant from the metropole, possessing economic potential but grappling with unequal power relations (Geiger 2008). Due to its peripheral location, numerous legal disparities exist among the central, provincial and local governments in frontier areas, leading to conflicts between local governments, NGOs and indigenous communities (De Jong et al. 2017). Examining the case of Central Sulawesi, Greg Acciaoli and Muhammad Nasrum (2020) introduce the term "frontierisation" to describe a condition whereby a place becomes the target of population and capital deployment from external sources due to its natural resources.

Scholars studying frontiers, as mentioned above, often emphasise the impact of external forces from metropolitan or global sources on dynamic local situations. However, my research shows that people in frontier regions possess their own laws and autonomy, often creating unruly situations that evade metropolitan regulations. For example, the illegal logger Labora Sitorus (see below) bribed more police at the local level than is usual in metropolitan Jakarta. Consequently, money in the frontier circulates locally through numerous illegal activities.

The concept of the frontier among previous scholars has tended to be used in a highly flexible manner, which has had the effect of rendering the term "frontier" quite slippery. My contribution to the discussion of the frontier in West Papua aims to shed light on how the frontier has served to exacerbate environmental crises and ecological disasters. In other words, studies on frontiers typically depict the disarray and overlapping bureaucracy in these areas, but often fail to address the consequences of such chaotic frontierisation.

Therefore, I conceptualise the "frontier" as a concrete institution that plays a significant role in the destruction of nature and the deterioration of people's living conditions. The phenomenon of the frontier is not a distant future occurrence; rather, it is manifested in our immediate surroundings. This ongoing reality has already resulted in ecological disasters due to uncoordinated and corrupt bureaucratic practices. Some previous scholars have, in fact, treated the frontier as a zone of transition and as a space where governments and people begin to build new imaginaries or conceptualise frontiers as "imaginary projects" that cultivate new economic and ecological forms (Tsing 2005, Cons / Elienberg 2019). For example, the current large-scale Indonesian development projects, including food estates and oil palm plantations, operate through the lens of the frontier concept as both an imaginary and a plan focused on accumulation and entrepreneurial opportunities, with the aim of attracting more settler colonialism. This imaginary frontier of accumulation results, however, in the dispossession of Papuan land and the destruction of Papuan ecology.

Settler colonialism in West Papua

Although the frontier exists in the present and contains imagined plans for the future, it has a history. In the West Papuan context, the frontier is intricately linked to a history of racial violence, military threats and settler colonialism, giving it a distinct nuance compared to frontier case studies elsewhere in Indonesia, as described by Greg Acciaioli and Nasrum (2020); Edwin B. P. de Jong, Luuk Knippenberg and Laurens Bakker (2017); and Anna Tsing (2011). The Indonesian military has been involved in threats and violence there since the 1963 New York Agreement. During the transition to the "Act of Free Choice", the Indonesian army executed many Papuans and burned villages in the Sorong area. Moi tribal elders reported that the Indonesian army killed over a thousand people in the Sorong area, Ayamaru and Tamraw. In the racist eyes of the Indonesian army, all educated and critical Papuans are separatists and thus deserve to be imprisoned or killed. Hundreds of Papuans have been sent to prison (KKPK 2015: 95–112).

The Indonesian invasion of West Papua coincided with the implementation of the 1967 Foreign Investment Law (PMA), which transformed Papua into a new frontier for the extraction of natural resources, including gold, oil and timber. In 1978, the Indonesian government sent hundreds of settlers to secure land, particularly in Sorong greater area through a programme called "Transmigrasi", further marginalising indigenous Papuans. Papua's land is viewed as a profitable region where settlers can easily make money. Settler aims are coupled with weak law enforcement, which allows settlers to violate the law with impunity.

Although the Transmigrasi programme was halted in 2000, various special autonomy regulations and infrastructure development under Jokowi's government have indirectly encouraged spontaneous migrants to take control of these projects. Most of the new settlers no longer work in agriculture but in oil palm plantations.

The wave of these settlers following the Suharto era has been called "settler-led colonization" (McNamee 2023), for which the post-Suharto government, including Jokowi's government, has not provided any subsidies or financial incentives. Although the type of settler has changed during and following Suharto's time in office, Indonesian settlers have continued to maintain the same view towards Papua and its land. The settlers care only about the environmental wealth and natural resources that can be exploited and do not view Papuans

¹ The New York Agreement, signed between the Netherlands and Indonesia on 15 August 1962, facilitated the transfer of West Papua from Dutch to Indonesian control, initially under a United Nations Temporary Executive Authority. This agreement included the promise of a plebiscite by 1969 to allow Papuans to determine their own future. However, the subsequent "Act of Free Choice" in 1969, in which only 1,025 selected representatives voted under alleged coercion, led to West Papua's controversial integration into Indonesia.

themselves as equal and empowered workers. This is a deeply rooted colonialist view held by non-Papuan Indonesians.

In the case of Sorong, the object of this study, the arrival of settlers led to the dispossession of the indigenous Moi people through the purchase, for very little compensation, of their land, followed by the clearing of primary forests for timber; the conversion of sago groves into open rice fields, horticultural areas and housing estates; and the introduction of cattle and freshwater fish. The settlers also exploited marine resources by fishing for tuna and shrimp (Manning / Rumbiak 1989).

My fieldwork research in Sorong has revealed that settlers, rather than the state, have played a major role in the colonisation of West Papua over the past decade. The massive disbursement of special autonomy funds has triggered the voluntary migration of spontaneous colonists into Papua. These settlers come to frontier areas that have been opened up by deforestation and natural resource extraction. Data on the number of settlers after 2000 is not easy to obtain. However, Ananta et al. (2016) have shown that in most major towns and cities in Papua, Indonesian settlers, particularly ethnic Javanese, dominate the population, turning indigenous Papuans into a minority. Ananta et al. (2010) have shown that ethnic Javanese are the majority settlers in all regions of Papua, compared to other ethnicities.

Military-supported land dispossession: The case of PT Intimpura

An analysis of frontierisation in West Papua reveals a complex interplay of overlapping and uncoordinated government policies. Papua's frontierisation is characterised by fear of and intimidation by the military, coupled with converging laws and disjointed administrative policies. These two factors have resulted in massive land dispossession.

Since West Papua's integration into Indonesia in 1963, the military has been deeply involved in various business activities in the region (Poulgrain 2020). Market mechanisms in the Papua frontier regions cannot operate freely, as individuals are unable to buy and sell goods and services without coercive rules. The lack of a coherent legal framework can be traced back to investment companies that prioritise profit over the establishment of law, order and political governance. These companies typically aim to obscure land laws, using legal manoeuvres and collaboration with the military as strategies to facilitate their investments and enhance productivity.

The Indonesian military has played a significant role in PT Intimpura's logging operations in West Papua, particularly through its involvement in securing a logging concession granted by the government in 1990. This concession was granted largely without consultation with the Moi, the indigenous people of the area. Members of the military elite not only supported the company's operations, but also held shares in PT Intimpura and occupied key positions on its board of commissioners. This allowed the military to profit directly from the exploitation of West Papua's timber resources.

Military involvement in business operations related to land acquisition and deforestation has significantly contributed to the destruction of forests and the loss of biodiversity in Sorong. Bintang, an environmental activist I frequently met in Sorong, provided an illustrative example. He spent his childhood in Klamono, a district where oil was first discovered by the Dutch government in 1935. He recalled a life surrounded by abundant natural resources: walking to school through the forest, hunting pigs and harvesting wild bananas. Elders also remember that certain places in Sorong are named after areas where sago grows and where birds of paradise once played. However, the forests of Klamono have now been razed by palm oil companies.

Much like Bintang recalling his childhood, the Papuans around Maibo also remember foraging in the forests and cultivating small village gardens. But when the PT Intimpura company confiscated their land, foreign seeds and fertiliser were introduced to the village gardens. When the company left, the community was left with no traditional farming knowledge, as well as a decline in fish populations due to pesticide run-off. The once abundant fish can no longer be consumed due to the adverse effects of the pesticides introduced by the company.

In modern Indonesian history, the army has played a significant role in occupying state and private companies and plantations since the New Order regime overthrew the Indonesian Communist Party (PKI) and leftist organisations, which had been its main rivals during Sukarno's government (Stoler 2008, Gilbert 2024). Military operations in West Papua face few serious challenges as they are intertwined with the "theatre of torture" that has existed since the invasion of West Papua. Based on 431 documented cases of torture in Papua from 1963 to 2010 and 214 interviews, Budi Hernawan (2015) formulated the description "torture as a mode of governance" in Papua. He shows that a distinctive pattern of torture in West Papua is carried out in public with a targeted audience, namely the victim's family members and fellow villagers. The aim of public torture is not only to inflict trauma, but also to shame and dehumanise Papuans by treating them like animals.

The Institute of Environment and Forestry (KLHK) reported that in 2007, PT Intimpura controlled 330,000 hectares of forest in Papua, covering the districts of Aimas, Makbon and Beraur. PT Intimpura also has land holdings in other parts of the region, including the Fak-Fak and Bintuni districts. This land was acquired in the 1990s from the Moi communities with very low com-

pensation, during the peak of the New Order military government. This enabled Intimpura to become the largest timber company in the region, dominating logging and forest product processing. In Maibo, approximately 20 km from Sorong, local residents vividly recall the events of 1989, when the logging firm PT Intimpura took control of lands belonging to the Klalibin and Moi communities, forcing the residents of Maibo Village to relocate. The company brought in Indonesian settlers, significantly altering the local population (Wandita et al. 2019).

When PT Intimpura collapsed in 2010, part of its logging concession was eventually converted into an oil palm concession, operated by PT Henrison Inti Persada. This company continued to hold the cultivation rights originally granted to PT Intimpura. Additionally, PT Intimpura subcontracted its land to several palm oil companies. After PT Henrison Inti Persada's departure, following the revocation of its license by the Sorong regent in 2021, the land reverted to the Indigenous Moi community (Jong / Yewen 2021).²

In 2003, PT Intimpura became one of the largest plywood companies in Sorong, operating a massive factory that produced 264,000 cubic meters of plywood annually (Franky / Morgan 2015). However, as the forests rapidly vanished, it became common for timber companies to continue exploiting Papuan land by shifting their investments to the rapidly expanding oil palm industry. This strategy allowed them to demonstrate ongoing activity and operations before their forest management permits expired.

When PT Intimpura departed in 2010, it left behind a devastated landscape, having damaged the river – the village's primary water source – and neglecting any reforestation efforts. The once-deep river had become a shallow stream, with felled trees contaminating its waters and rendering it impassable. Beyond the environmental impact, the company also created dependence on foreign seeds and chemical fertilisers.

² I obtained information about Intimpura from an environmental activist based in Sorong. I cross-checked this information with a locally circulated newspaper and found it to be accurate. In West Papua, it is common for companies to transfer their timber or oil palm operations to other companies.

Timber Mafia in Sorong: The case of Labora Sitorus

The prominent presence of the military and police in Papua is attributed to the region's separatist insurgency, which occasionally clashes with Indonesian security forces. Additionally, West Papua is considered a "vital national asset" requiring protection (Supriatma 2013: 96). Consequently, these institutions are involved not only in securing the region but also in extracting its natural resources and commodities. In the frontier area, the military and police operate like a "rhizome state", with their roots proliferating in a hidden manner, becoming the shadow of the formal institutions (Baker 2013: 315). In the border town of Sorong, not only the military but also the police play a role in shaping the frontier. These two institutions were merged during the Suharto era, but in 2001, under President Gus Dur, the police were separated and given greater power and autonomy.

During my first research on human-bird relations in Raja Ampat in 2018, with anthropologist Anna Tsing and two ornithologists, my guide took me deep into the forest. In Waisai, the capital of Raja Ampat, we drove an hour and a half and then walked for another hour and a half. The pathways were no longer mere forest trails, but had come to resemble truck roads. The guide and local people frequently mentioned the name Labora, identifying him as the person responsible for the extensive timber cutting along our route to the bird watching area.

Since then, I have been gathering data on Labora Sitorus, both through interviews with environmental NGO activists and lawyers based in Sorong. In addition to these interviews, I have been collecting information from national newspapers especially provided by *Tempo*, a leading Indonesian news magazine and newspaper known for its in-depth investigative journalism. Labora's illegal logging operations stretched from Sorong to the edge of Raja Ampat. He left the once dense forest riddled with open roads and with invasive weeds covering the remains of dead trees.³

Labora Sitorus's name is well known throughout Sorong and the Raja Ampat islands. He was a First Adjunct Police Inspector (*bintara*), one of the lowest ranks in the police force. Despite his rank, people in Sorong call him the "timber mafia" (*mafia hutan*) and the "trillionaire policeman" (*polisi triliunan*). In 2007, Labora was accused of illegal logging along with ten other logging companies. However, due to insufficient evidence, Labora was released. To expand his business, Labora set up two companies – PT Rotua and PT Seno Adi Wijaya – which he used to carry out illegal logging and to stockpile fuel oil.

³ Based on the fieldwork conducted, Anna Tsing (2018) produced a report detailing the invasive species that have emerged as a result of commercial logging in Raja Ampat.

In 2013, Labora was caught with 40 containers of timber ready to be shipped to Surabaya under his company PT Rotua. He lacked the necessary documentation and permits from the Forestry Institution and only had a letter from the Trade Office (*Dinas Perdagangan*) of Sorong City. In the same year, he was also caught storing 1,000 tonnes of petrol in three fuel barges. Labora was subsequently charged with illegal logging and illegal fuel storage.

Financial transaction reports revealed that transactions in Labora's accounts amounted to 1.5 trillion rupiah, spread across 60 bank accounts – an unusual amount for a low-ranking police officer earning 4 million rupiah per month (Tempo 2014b). During the trial, Labora was never transferred to other cities. Many senior police officers, accused of being his "backing", filled the courtroom with their staff, creating an atmosphere of implicit intimidation for the judges.

Eventually Labora was sentenced to two years in prison, a much lighter sentence than the 15 years sought by the prosecution, as he was acquitted of money laundering. A disturbing incident occurred when Labora began to testify about being blackmailed by senior police officers. An unidentified group began to create chaos in the courtroom, slamming chairs and breaking glass. During a break in the proceedings, this group "kidnapped" Labora, allegedly to prevent him from continuing to testify. After being "controlled" and warned not to reveal any more information, Labora was returned to the courtroom.

When Labora was finally sentenced to just two years, hundreds of unidentified supporters embraced him. He was then carried and paraded around. The joyous celebration was accompanied by the sound of *tambur* (traditional Papuan drums) played by his supporters. They danced around and shouted "Long live Labora, long live Labora!" (Tempo 2014a).

The Sorong public is well aware that Labora has not acted alone over the years. As revealed in his courtroom confession, Labora, a low-ranking police officer, was merely an operator in the illegal logging operation, paying tribute to his superiors in the police and army, who became his real backing. Through his brother, his wife and his bank accounts, Labora reportedly made at least 265 financial transactions, funnelling money to 33 senior police officers, including members of the Mobile Brigade Corps (*Brimob*) and the marine police (*Polisi Air*). These transactions also extended to the Indonesian Police Headquarters, the Papua Provincial Police (*Polda*) and the sub-regional police of Sorong, Raja Ampat and Aimas (Tempo 2014c: 92–93).

People may wonder how a man with minimal state authority could amass such large sums of money. According to sources, Labora was involved in trans-

^{4 &}quot;Backing" refers to the support provided to gangsters and individuals engaged in criminal activities who are "backed up" by the police or army (Barker 1998: 39–40). This practice intensified during the New Order era under President Suharto. In the present era, such political backing is being used to protect illegal mining operations throughout Indonesia.

ferring large sums of money within the police force, including transactions to the Jakarta police headquarters and the provincial police chief. Interestingly, the highest ranks in Jakarta did not receive the largest amounts; instead, commanders at the district level received funds at least three times larger than those illegally transferred to Jakarta (Baker 2015).

The frontier in Sorong is not only affected by external investment and violence, it's also shaped by local change and interacts with the forces that drive intense exploitation. In other words, the frontier in Sorong combines strong dominance with unregulated activities, creating both opportunities and significant challenges at the local level itself. In the case of Labora and other timber mafias in Sorong, they pay Papuans only between 100,000 and 600,000 rupiah per cubic meter of merbau timber (Papuan ironwood, *Intsia bijuga*) felled from their traditional land. Meanwhile, the price of a cubic meter of merbau timber increases more than tenfold once it reaches markets outside Papua. Under Appendix III of the Convention on International Trade in Endangered Species (CITES), commercial logging of merbau timber is prohibited. However, at the local level, illegal agreements between police, local government and local people facilitate the continued logging and sale of this wood.

Within the frontier area, the rule of law is both broken and weakened. When prosecutors arrived to enforce the Supreme Court ruling, they discovered that Labora had already left Sorong Prison for medical treatment and had not returned. He escaped by staying at his home for a year before a joint security team of more than six hundred military and police personnel was sent to arrest him in 2015. Labora was initially sentenced to two years in prison by the Sorong court. However, on the appeal of the Jayapura court, his sentence was increased to eight years due to new evidence, including involvement in money laundering.

Dissatisfied with the outcome, Labora appealed to the Jakarta Supreme Court, which increased his sentence to 15 years. However, embodying the image of a strong man seemingly immune to the law, Labora did not serve his full sentence. During my fieldwork in 2021, after the pandemic, people in Sorong said that he had been released and was living in his house on the coast. His sons and brothers now carry on his business. Through his brother Robin, he laundered money from illegal logging and petrol stockpiling into housing developments. One such development I found is on compacted swampy land along the road of Kilometre 10, which refers to an area located about 10 kilometres from the city centre. Many houses have been built there, but they remain unoccupied because they were built on unsuitable swampy terrain. The housing project was most probably designed to hide Labora's illegal activities and was never seriously intended as a quality investment.

Labora's case illustrates the indicators of illegal logging operations facilitated by patron-client networks within the state bureaucracy. These networks,

entrenched since the New Order period, enabled logging activities orchestrated by state actors, reaching their height in the 1990s (Dauvergne 1997). However, the legacy of this period continues to shape practices in peripheral areas like Sorong, where illegal logging persisted until Labora's case came to light. This persistence demonstrates that the underlying mechanisms remain intact, suggesting that such organised forest crimes are likely to continue well beyond the Jokowi government.⁵

Uncoordinated governance: Sand mining around Sorong

Capitalist interests and uncoordinated bureaucrats have significantly reshaped the Sorong landscape. Through a mix of legal and illegal activities, a complex network of actors and institutions has emerged, involving local communities, settlers and environmentalists. This frontier process is characterised by corrupt and uncoordinated governance, which enables the illegal exploitation of natural resources, as seen in the actions of Labora Sitorus and subsequent generations.

By 2018 the Indonesian government had issued permits for natural resource extraction in Papua covering almost 5 million hectares. This included permits for the use of timber products in natural forests, mining licenses, non-timber forest products businesses and industrial plantations (Samperante 2020: 41). In terms of plantation conversion, a report by Greenpeace (2021) reveals that between 2011 and 2019, almost one million hectares were affected.

Deforestation and environmental crises were exacerbated by the introduction of the Omnibus Law, officially known as the Job Creation Law (*Undang-Undang Cipta Kerja*). This law, which aimed to reform various regulatory frameworks to encourage investment and improve the ease of doing business, came into effect in November 2020.

In Sorong, the Omnibus Law simplified investment licensing through the One-Stop Licensing Programme (PTSP). The head of Bappeda (Development Planning Office) Sorong told me⁶ that in order to streamline bureaucracy and speed up investment, they had merged three offices: the Regional Development Planning Agency, the RT/RW Office (Spatial Planning and Regional Planning) and the Environment Office. Now, instead of navigating multiple bureaucratic channels prone to bribery, investors apply through the One Single Submission (OSS) online portal.

⁵ After Labora, dozens of cases of illegal logging were repeatedly reported in Sorong and surrounding areas, mirroring Labora's tactics. The pattern remains the same: low-ranking police officers or businesspeople who own various timber companies bribe police and Sorong bureaucrats to facilitate their logging operations (JPIK 2023, Wicaksono 2020).

⁶ The interviews took place in his office on 16 January 2023 and 10 July 2023.

The OSS, part of the Omnibus Law, centralises investment decision-making in Jakarta, reducing local authority. Consequently, Papua's local governments and people bear the impact of investments directed from Jakarta. Thus, the head of Bappeda argued to me that when investors violate environmental regulations and cause social disruption at the local level, the central government is either unaware or uninterested in addressing these issues. Meanwhile, local governments are obsessed with increasing revenues by attracting investors, even if not all investments, such as sand mining, are legal. The most significant casualty in these cases is the AMDAL (Environmental Impact Assessment).

The Environmental Agency, which is supposed to act as a watchdog and oversee the AMDAL of investments, has essentially become an office that merely rubberstamps approval of all investment licenses. During my visit to the Environmental Agency in Sorong,⁷ officials rarely revoked investment permits that had been approved by the Bappeda or the Spatial and Territorial Office (RT-RW), even when these permits clearly violated environmental feasibility. For example, investment permits for hotels, petrol stations, multi-storey buildings and public housing often lack provisions for drainage around the buildings or for proper waste management.

With my interlocutor Salim, an environmental activist from Sorong, we rode around on motorbikes looking for infrastructure that was in flagrant violation of environmental feasibility. In most cases we found new hotels and shops whose construction had blocked the drainage. This violation was often ignored by the government agencies, especially the Public Works Department (*Dinas Pekerjaan Umum* (PU)), which usually deals with flooding caused by broken infrastructure. However, the PU is slow to intervene after cases of flooding, which frequently occur from June to August. Even then, they facilitate new drainage in front of the affected buildings without really penalising owners of the structures responsible.

Another blatant and obvious violation of the AMDAL is the illegal sand quarry in the hills of Sorong. During my research on January 2023, the sand quarry had been temporarily closed due to a lawsuit filed by settler communities against the sand quarry owners. My interlocutor Salim was providing assistance to residents affected by flooding. I went with him to a regular monthly meeting organised for the flood-affected neighbourhood. Naively, I expected most of the attendees to be indigenous Moi Papuans. But I was surprised to find that most of the flood victims were settlers. In these frontier areas, environmental disasters have had a significant impact on the settlers who have displaced the Moi. After the Moi were displaced from their land around the hills, companies and settlers took over the land, the forest and now the sand. Ultimately, the degraded environment is striking back at both the settlers and the remaining Moi.

The settlers at the meeting said they hardly knew who the owners of the sand quarry companies were until their names appeared in the court documents. During several meetings I attended at the home of the flood victims in January 2022, Salim told me:

People like Sembiring, Lombang Gaul, Chi, Sibarani and Labora are ethnic Chinese and Sumatran entrepreneurs who deforest the hills and carve out the sand hills for extraction. Illegal mining operations have political backing, which is why they can continue despite being illegal.

In the frontier area, backing is something invisible but powerful. These sand quarries are able to operate because they bribe the bureaucrats, and in return, the sand miners are allowed to operate. Illegal sand mines lack AMDAL certificates and various government environmental permits, such as the Environmental Management or Letter of Monitoring Environmental Management. AMDAL approval ideally requires sand quarries to provide tanks to filter the sludge and to discharge only the filtered water downstream. The AMDAL also requires the quarry to dredge streams and canals every six months to prevent siltation. The AMDAL permit includes the arrangement of compensation for river sedimentation caused by the quarry's waste. But no company has implemented this obligation. "Only political candidates care, during the election campaign," says Salim sceptically. "They hire excavators to dig up the sand. The goal is to get

Figure 1: A road damaged by sand mining trucks



them elected in political campaigns. But these politicians' actions of digging the river are like curing the symptom of a fever, while the underlying disease is not cured". Mud from the sand quarry waste is causing river siltation and stagnation downstream. As a result, the Public Works Office (PU), which is responsible for infrastructure, has to dredge the rivers. But it doesn't take long for the rivers to become shallow again, as the sand quarries dump mud waste from the hills almost every day. To regularly dredge the river with excavators, the PU needs an additional budget allocation. The local residents believe that the PU is responsible for maintaining the canals and streams because it receives money from the sand quarry companies.

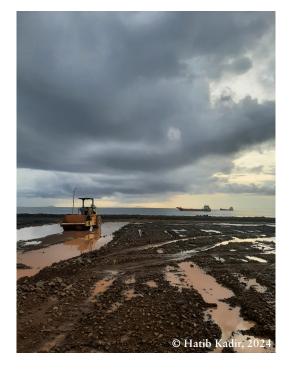
During my fieldwork, I often walked along the hills of Sorong with Salim and Wadi, a social activist and sociology lecturer at a private university in Sorong. In the western part of the hills, there is only a mossy and deserted area. About five households remain, and the hills have become a dumping ground for car wrecks. While significant mining activity had ceased, the traces of past business operations remain evident throughout the deserted landscape.

Next to the abandoned hills, mining activity has continued, with excavators moving back and forth. One on visit, around five tractors were digging into the hills, while trucks transported materials in and out. Excavators were clearing the deforested hills and using water jets to separate sand from the mud. Some sand diggers who continue to work independently told me that this active mine is owned by Reynold, a retired high-ranking police officer of Chinese Kei descent. Reynold became the owner after the imprisonment of his rival Labora. Since Labora's sentencing in 2015, other police officers who were once his rivals have been able to carry out similar operations.

For Labora, selling timber was not enough; he soon turned to sand extraction after deforesting the land. He supplied sand and stone for land reclamation projects in the eastern part of Sorong, sourcing these materials from Mare Hill, located at the easternmost point of the city. The hills were excavated by two prominent businessmen: Ongko Beng, the largest hotel owner in Sorong, and

Labora. They divided the land between them and blasted the hills, which now stand at half their original height due to the dredging operations. The workforce consisted of Papuan settlers from Maybrat, alongside Indonesian settlers from Ambon, Flores and Timor, who worked lovally for the two different bosses but lived in separate villages and neighbourhoods based on their ethnic backgrounds. When I attended another meeting with the flood victims in one of their homes in July 2022, the settlers brought two lawyers from the Legal Aid Organisation to represent them. The lawyers reported that only three companies had legal permits to mine sand, while the rest were operating without permits. These illegal sand mining operations do not pay taxes or officially contribute to So-

Figure 2: Land reclamation using local stone and sand has altered tidal patterns and destroyed homes on Dom Island, according to local residents



rong's regional income. Both the lawyers and the meeting participants believed that the illegal companies continue to operate either because the sand miners bribe bureaucrats to avoid paying taxes or because corrupt officials extort the sand quarry owners. Two months after my research, it became evident that the illegal sand mining operations contributing to the flooding in Sorong City were facilitated by sand miners bribing bureaucrats as argued by the lawyers (Costa 2022, Lamak 2022).

Salim wondered why the PTSP (Integrated Licensing Service) had been established, noting that previously, each institution had operated independently, often to the detriment of the others. For instance, when the Local Revenue Office (*Dispenda*) allowed extractive companies to operate, the Public Works Office (PU) bore the burden of repairing the damaged roads used by sand trucks. Salim also believed that the PU department received "additional income" from sand quarry owners to regularly maintain the roads damaged by the quarry owners' trucks. These roads need constant patching and maintenance. But even when the government legalises sand quarrying, it risks protests from forestry institutions and environmental activists. These groups argue that deforesting the primary forest on the hills of Sorong threatens the water supply for residents of Sorong City.

The consequences of this uncoordinated and corrupt governance in Papua's frontier areas in dealing with illegal sand mining not only damage urban infrastructure, but also increase costs for local government in dealing with issues such as dredging silted rivers. At the grassroots level, corruption and illicit governance exacerbate the frequency and severity of mudflows, which increase over time.

Detrimental effects of sand mining

Andre is an urban civil engineer studying the history of river impacts from sand mining in the Sorong hills. On 7 January 2022, I met him at his office. When he moved to Sorong in 2001, he noticed that sand quarries were already established in some places in the western hills, about 8 km away from his area. But recently, the mining has moved closer, right above his neighbourhood in the Matalamagi area. The shift to the eastern hills is because the sand in the western hills has been exhausted, leaving only mud. Andre told me that the sand quarry owners, looking for cheaper ways to operate, have moved to the eastern hills near basin-shaped springs. Large hoses now suck up the spring water that flows into the streams, which is then used to wash the sand and remove the silt. The waste silt is dumped daily into the rivers and canals, making all the streams in Sorong muddy with sediment. This sediment flows to lower areas, causing streams to become shallow and mud floods to occur during the rainy season.

Figure 3: Sorong resident sweeping away the mud after the murky floodwaters receded into the river

When the mud floods overflow into neighbourhoods, residents have to wait for the water to recede, leaving behind the mud that has flowed from their terraces into their living rooms. They then have to sweep the mud away, leaving hard-to-remove stains on walls and floors. Mud flooding particularly affects houses along the banks of the main rivers, such as the Remu and Kalagison River. Maksi, a Sorong artist and literacy activist, shared his experiences of flooding when I visited his house on the Remu riverbank in mid-July 2023. He demonstrated the height of the flood



when it rains by pointing to the level of his neck. Maksi often has to evacuate his collection of books to the second floor to protect them from the floods. He recalled sadly how his library had previously attracted many children to read, but now the floods were disrupting this. According to Maksi, floods get worse and last longer when they coincide with tidal waves, which usually occur from June to August. The southerly winds push seawater upstream into the Remu River, causing the mud to spill onto roads and neighbourhoods.

Inevitably, over the past ten years, Sorong has experienced increasingly severe flooding when rainfall intensity is high. Severe flooding in Sorong is becoming more frequent. Although Sorong's annual rainfall has remained stable at between 245.00 and 277.83 millimetres per year, the rate of flooding in the area is increasing. In 2018, 250 households or around 78 per cent of the total 321 households surveyed claimed to experience flooding 15–20 times per year (Asriadi 2018). Based on my observations and a series of meetings with residents affected by the flooding, this destruction is directly related to the sand excavation area, which is expanding from year to year.

According to residents, the flooding has worsened over time since 2019, has also affected residences constructed on the outskirts of Sorong City at km 13, which refers to an area about 13 kilometres from the city centre. Km 13 is significant because it's where new housing developments have been built on swampy land. The housing estate there lacks proper drainage and waste management infrastructure, making it highly vulnerable to annual flooding. Especially

in flat areas without adequate drainage, roads and houses are particularly at risk. This situation is exacerbated by residents who occasionally use the drains to dispose of trash. This unknowingly contributes to blockages. As a result, during heavy rains, accumulated waste, along with mud from the hills, often spills onto the streets and contaminates nearby areas, including the homes of local residents.

Conclusion

One indicator of a frontier area is the opening up of the forest and the extraction of its resources (Tsing 2011). People in the frontier extract resources until they are depleted, which makes the condition of the frontier continually expand (Cons / Elienberg 2019). As seen in the case of the Sorong frontier, a recurrent indicator is the exhaustive exploitation of resources. When Intimpura completed its logging activities, the deforested land was used for oil palm cultivation. Similarly, when illegal logging had devastated the frontier area, the next phase was to exploit what was left, such as sand mining. This is exemplified by Labora Sitorus and other settler businesspeople who blasted hills to extract sand for infrastructure and housing reclamation projects.

In these frontier areas, the settler capitalists display insatiable greed. On a walk into the hills in August 2022, I met a sand quarry owner. Sitting under the shade of his hut with his employees, taking a break from their work, he proudly shared his plans for the sand quarry once it has been exhausted. He wants to develop a paragliding site and suspension bridge to attract tourists. He also plans to open a coffee shop where visitors can enjoy the "stunning view" of Sorong from the hills. The frontier seems to have no end, with Indigenous Papuans either completely displaced or involved in various extractive activities, such as working on oil palm plantations or in sand quarries.

In the contemporary context of frontier regions, rather than portraying Papua solely as a site of exploitation by central authorities in the metropolis, as is usual for political scientists and human rights advocates, this paper demonstrates the shrewd tactics employed by settlers in establishing their own networks of nepotism and bribery to facilitate extraction at the grassroots level. The Labora case and cases of illegal sand mining serve as prominent examples.

The AMDAL process, intended to safeguard against environmentally damaging investments, is often manipulated by companies. A similar situation to that described in Sorong is now unfolding in other parts of Papua, such as Boven Digoel, where the Awyu indigenous people are protesting the government's approval of an AMDAL for an oil palm plantation. This approval was granted without consulting the indigenous communities living in the Boven

Digoel forest. AMDALs, which are supposed to be a lever to control capital investment, are themselves being manipulated by companies.

Looking to the future from my vantage point in Sorong, it is evident that the process of frontierisation unfolding in Papua will not only persist, but also expand across the region. Over the past decade, we have witnessed the emergence of three major projects that continue to threaten Papuan communities and their environment: the Merauke Integrated Food and Energy Estate (see Chao 2022), the construction of the Trans Papua Highway (Pamungkas 2021) and the expansion of the oil palm industry. These projects have further facilitated the influx of settlers eager to take advantage of these frontier opportunities.

As resources in other outer islands such as Kalimantan dwindle due to exploitation by mining companies and logging, the extractive industries will aggressively target Papua, backed by military, police and bureaucratic support. There are currently no signs that this relentless exploitation of Papua's frontier will cease in the near future. Looking back over the past decade, we see a growing need for collaborative solidarity among indigenous people affected by frontierisation, together with civil society movements, NGOs, academic intellectuals and even social media influencers. This collective effort has at least slowed down the brutal recurrence of frontierisation in West Papua. Since I began my intensive research in January 2022, after the COVID-19 pandemic, I have met with NGO activists working on land grabbing, environmental crises, ecotourism and customary land mapping. These include Salim, my activist interlocutor. Their aim is to raise awareness and push the local government to prioritise environmental impact over mere economic gain, which often leads to corruption and bribery.

Finally, beyond the issues of corruption and environmental degradation discussed in this paper, another important reason to halt frontierisation is its contribution to racial economic inequality. While I cannot explore all the implications in this article, it is clear that the benefits of resource extraction are typically unevenly distributed. Profits flow to distant companies, investors and settlers, while indigenous communities bear the brunt of the negative impacts and are left behind. Reflecting on the economic inequality caused by the frontierisation, Timothius, one of the Papuan activists I met, expressed with sorrow how "the Indonesian government has dressed us in new clothes. But the old wounds in our bodies have not healed. We are like in the painting of the Last Supper. It's the government elite eating together at one table. While we were like beggars and dogs scavenging for food under the table." This allegory equates the clothes with physical infrastructure, while the old wounds represent the violence and racism that come with physical development projects. The frontierisation of infrastructure and the various funds flowing into Papua

benefit only the investors, the settlers, who enjoy their dinner at the table, while the indigenous West Papuans are left to scavenge for the crumbs of frontierisation because they are intentionally and structurally excluded from the competition for the frontier.

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