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Author

Alexander, C, Teaiwa, K, Neef, A

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PHOSPHATE MINING IN DISTANT PLACES

The Dark Side of New Zealand's Agricultural Economic Success

Catherine Alexander, Katerina Teaiwa, and Andreas Neef

Introduction

The New Zealand economy, right from early colonial days, has been strongly agricultural, built on the back of sheep and beef exports reliant on the growth of pasture. This is an unusual position for a Global North country located in the South Pacific, far away from key markets. Although blessed with a temperate climate and plentiful rainfall, New Zealand soils – particularly under European land management practices – were found to be deficient of key nutrients such as phosphorus, something the early colonial government realised in 1900 following serious agricultural productivity declines (Gale, 2019). Since that time, fertiliser has been used extensively to improve the nutritional quality and agricultural output of New Zealand soils. An essential component of fertiliser is phosphate, a non-renewable resource that is mined, crushed, transported and subsequently spread over New Zealand beef and dairy farms to promote grass growth. The application of phosphate fertilisers is one of a farm's greatest costs but also has one of the largest influences on farm profitability. However, the legacy of phosphate extraction and use to support New Zealand's economy has come at a devastatingly high cost to the lands the phosphate is extracted from.

This chapter aims to expand extractive scholarship in two ways. First, drawing on insights from critical development studies and postcolonial theory, it advances an understanding of the historic and continued role of global extractivism in the economic and political dominance of regional powers in the South Pacific. Second, it offers critical insight into the interchange between continued resource extractivism and climate change migration.

Extractivism is generally understood as an accumulation by dispossession strategy, predicated as a capitalist-dominated growth model reliant on the overexploitation of natural resources destined for export to world markets (Hamouchene, 2021). Hamouchene (2021), citing Acosta (2013), defines extractivism as 'an activity whose social and environmental costs are not included in the prices of products. These are externalised and carried by a society without democratic rights in a transnational entrepreneurial world'.

Extractivism was historically undertaken by European countries under imperial and colonial hegemony to satisfy demand for global resources. Conceptualised under dependency

theory and world systems theory, extractivism facilitates economic drain from the periphery to the core, relying on forms of dispossession, physical and structural violence to extract resources from a territory, despite the impact on local socioecological relations (Chagnon, 2022). Exploiting natural resources was initially framed as necessary for the wealth and wellbeing of populations in host locations – now it is increasingly undertaken by corporations and non-governmental organisations expanding resource frontiers (Tsing, 2005). Extractivism can be understood as both a material and an ideological concept, whereby resources are removed under the guise of ‘development’, continuing the enrichment of wealthy countries and individuals within, at the expense of poorer ones (Morris, 2019). The role of the state is central in establishing and supporting extractivism, and the global boom of primary commodities continues to influence development policies, growth rates and intensification of resource extraction for export purposes. Thereby, through extensive and interlinked commodity supply chains the global South is still supporting consumption patterns of the global North, albeit through private capital.

We add to the discourse on the long-term impact of colonial hegemony, highlighting how racialised concepts continue to be upheld in the prioritisation of access to resources and contending that neo-liberalisation has created global inequalities and production structures that continue and extend the inequalities created by colonisation. We critique New Zealand’s role in phosphate extractivism, identifying that it operates as a form of ‘othering’, assimilating Indigenous peoples to the realm of nature or ‘savagery’, and enabling a distancing from and deprioritising of their needs and interests (Ashcroft, 1998; Said, 1993). This becomes central to positioning the acceptability of resource extraction from faraway lands. This sanctioning of environmental harm and dispossession by the state, coupled with ‘othering’ of those directly impacted, serves to establish a set of discursive power relations that underpin global commodity chains operating in areas with marginalised Indigenous populations. In this way ‘the wealthy nations of the global North continue to rely on extraction to finance economic growth and sustain high levels of consumption’ (Hickel, Sullivan, and Zoomkawala, 2021, p. 1030).

The chapter is structured as follows: in the next section, we lay out the history of New Zealand’s extractive relationship with its Pacific neighbours, highlighting Banaba Island, where 90% of the island’s surface was mined for phosphate to support the development of industrial agricultural practices in New Zealand and Australia (Gale, 2019). The mining left behind an ‘industrial wasteland’ (Teaiwa, 2014, p. xiii), requiring the forced relocation of the Indigenous Banabans – an act which has led to inter-generational trauma through alienation from their homeland and loss of livelihood and culture (Tregus, 2021). Next, we examine New Zealand’s sourcing of phosphate from Western Sahara in North Africa, where the Indigenous Sahrawi people have been subject to a brutal Moroccan occupation, resulting in the alienation of 80% of their land and its immense natural resources for nearly 47 years. An occupying power has no legal authority to exploit the natural resources and property of annexed land for the benefit of its own economy. Yet, Morocco continues to exploit Western Sahara for its valuable natural resources, including the world’s largest phosphate deposits (Allan et al., 2016, 2021). Despite international condemnation over the treatment of the Sahrawi and International Court of Justice (1975) and EU Court of Justice judgements (CJEU C-104/16 and C-266/16) opposing the Moroccan occupation and resource exploitation, New Zealand continues to take advantage of this ‘frozen conflict’ in pursuit of phosphate, remaining the only western nation to source phosphate from contested Western Sahara (Western Sahara Resource Watch, 2022). In the final section, we examine the political

economy of ongoing extractivism in the context of climate change, arguing that the silence of New Zealand and EU governments reinforces a form of policy ‘lock-in’, sustaining business-as-usual offshore extractive practices and supporting the agricultural sector which generates the majority of New Zealand’s greenhouse gas emissions (Ministry for the Environment, 2022). Climate migration for low-lying Pacific Island nations thus becomes an accepted outcome for New Zealand’s continued pursuit of an agricultural economy.

This chapter brings together descendants of those who worked to remove the soil and rock from Banaba and those who were forced to move from their homeland in support of New Zealand and Australia’s national interest. The first author spent the early part of her childhood on Banaba – during the days when it was called Ocean Island – as part of a family employed by the British Phosphate Commissioners (BPC), a company set up by Britain, Australia and New Zealand after WWI to exploit the phosphate from Banaba (Ocean Island), Nauru and Christmas Island. On Banaba, this period ended with the departure of BPC employees following the cessation of mining and amalgamation of Banaba into the newly formed Republic of Kiribati. Records from family archives have been used in the research for this chapter. The second author is Banaban, descended from families of the villages of Tabiang and Tabwewa on both Banaba and the new Banaban home of Rabi in northern Fiji. She is a visual artist and Professor of Pacific Studies, and has spent the majority of her academic career researching Banaban history, particularly in the BPC records of the National Archives of Australia. Katerina’s father, John Tabakitoa Teaiwa, was the Chairman of the Rabi Council of Leaders 1996–2001 and the Banaban member in the Kiribati parliament in that period. The third author is German and has conducted research on global land and resource grabbing practices in the context of agri-industrial expansion, tourism development and mining over the past 15 years.

The Critical Role of Phosphate in Agriculture

All plant life is dependent on phosphorus, a non-renewable nutrient created over millennia that has no substitutes. Plants use phosphorous, together with nitrogen and potassium, as an essential component of cell and plant growth, thereby expanding their fertility, increasing yields and, notably for agriculture, promoting grass growth (Cordell, 2009).

Early human agriculture recycled phosphorus through the reuse of human and animal waste into soils (Cordell, 2009). However, the evolution of cities required increasing productivity from agricultural land to support high population densities. The Green Revolution facilitated substantial increases in crop production through the development of new plant types and significant increases in the use of plant nutrient additives, such as fertilisers. Phosphate, an essential ingredient in fertiliser, is itself an essential ingredient in the formation, maintenance and expansion of industrial global agricultural practices and food supply and food security (Cordell, 2009; Teaiwa, 2014). Over 90% of the world’s demand for phosphorus is for food production (Cordell, 2009).

Nearly all of the phosphorus that farmers use today – and that is consumed in food – is mined from a handful of sources of phosphate rock around the world including China, Morocco, Western Sahara, the United States and Russia (Pistilli, 2021). There are geopolitical implications for global food security with the combination of increasing world population, coupled with changing dietary trends including a rising demand for agricultural products, leading to increased agricultural demands for phosphate from a finite supply of accessible phosphate reserves (Cordell, 2009; Pistilli, 2021).

Mineral fertilisers such as super phosphate have been a boon for New Zealand agriculture, enabling the naturally phosphate deficient soils to be developed into pasture growth and then lucrative meat and dairy exports. Even today phosphorus remains so critical to plant growth that without it New Zealand's agricultural production would decline by 'at least' 50% over ten years, resulting in a \$10 billion reduction in the economy (Melville, 2019). Gale notes that without access to decades of cheap high-quality easily accessible phosphate, New Zealand and Australia would not have been able to 'establish the industrial agricultural systems that were fundamental to their demographic, economic and social expansion' and subsequent Global North standing (2019, p. 737). Indeed, agriculture in both countries may not have been viable, or even possible in marginal areas (Gale, 2019). Obtaining a reliable source of phosphate altered their inter-generational development trajectory, a boon for New Zealand and a devastating loss for the Banabans and Sahrawi. The trajectories are altered, seemingly irrecoverably, across multiple generations and continue into the future.

Pacific Imperialism – The Case of Banaba Island

The Banaba story is one of carefully orchestrated separation of a people from their homeland (Teaiwa, 2014) and all of its tangible and intangible resources, over a period of eight decades. At first, this was undertaken through a 'wild west' buccaneer extractivist model of imperialism and later a colonial and neo-imperial hegemony under the guise of successive New Zealand and Australian governments, for the sole benefit of their domestic economies. This model reflected the new imperialism linking Global North demand for commodities and resulted in the complete integration of the Pacific communities into global extractive relationships giving rise to the inequalities we see today (Teaiwa, 2014).

At just six and a half square kilometres Banaba is a small raised coral island located 293 km from Nauru, its nearest neighbour, and 400 km from Tarawa its closest neighbour in the Kiribati group. Rising some 81 m from the sea, Banaba is composed of dolomitic coralline limestone and was covered with a layer of phosphate that had been mineralised and concentrated by tectonic processes of uplift and sinking over millennia to form some of the purest deposits of calcium phosphate known on Earth (International Fertilizer Development Centre (IFDC), 2010). It is almost inconceivable that such a small and geographically isolated island could be the subject of decades of geo-political manoeuvrings and feature so prominently in the economic development of not one, but two regional powers of the South Pacific with the critical support of the British colonial administration. In this section, we briefly explore the difficult phosphate history of Banaba, beginning with the discovery of phosphate on the island in 1900 and culminating with the near total destruction of the island 80 years later.

The discovery of phosphate on Banaba in 1900 is attributed to Albert Ellis, working as a prospector for the John T Arundel and Company of London (later the Pacific Islands Phosphate Company), which had widespread trading, prospecting and plantation interests in the Pacific Islands. This was a time of European imperialist ventures which practised long-term political hegemony to 'locate, identify, occupy and ultimately extract both living and non-living resources' from around the globe including the Pacific Ocean (Cushman, 2013, p. 274). Banaba had at that time been overlooked by imperial conquests and Ellis upon confirming the presence of phosphate on Banaba realised they would have to 'act fast or risk losing these discoveries to a competitor' (Cushman 2013, p. 118).

When Ellis discovered phosphate on Banaba, he found a wholly self-sufficient community, ‘rich in plant and bird life’ with five cultural groupings of approximately 500 people, collective governance systems (Teaiwa, 2014) and strong connections to surrounding islands (Hau’ofa, 1993; Office of Te Beretitenti & T’Makei Services, 2012). The island had supported up to 2,500 Banabans prior to a drought in the 1870s and temporary relocation to Tahiti and Hawai’i after which many returned to the island. Ellis himself noted upon his arrival ‘a scene of impressive pristine beauty rapidly spread out before us’ (Ellis, 1936). Teaiwa (2014, p. 178) notes the haunting resonance of Ellis’ statement, made at the point of the discovery, that Banaban phosphate was more valuable than ‘all the gold mines in the country’, which irreparably altered not only the trajectories of the Indigenous Banabans but that of New Zealand and Australia, then, now and into the future. Together with Nauru, Banaba was the first major phosphate producing island that had significant Indigenous populations at the time of phosphate discovery (Cushman, 2013).

Once mining commenced and colonial power structures were established, the collective organisation of Banaba and Banabans which had existed for generations was fractured, and Banabans were placed under colonial hegemony, effectively disempowered to become ‘second class citizens’ and colonial wards in their own land (Baraclough, 1977; Teaiwa, 2014).

Extractivism’s imperial and colonial hegemonic roots can be clearly seen in the use of state and structural violence to ensure Banaba was mined in its entirety, the landscape degraded to such a point that it is no longer able to sustain a population. From the outset, the negotiation of an agreement to mine the island was, although a standard agreement for the time, an example of the racist component of empiricism. Despite living on an island for generations, with vibrant arts practices, well-structured social and economic relations, a fully functioning society, and a complex network of reciprocal relationships with other Pacific communities (Hau’ofa, 1993), the Banabans were portrayed in the role of native ‘savage’. This can be seen in the terms of the initial agreement, 50 pounds per year for 999 years ‘or trade to that value’ (Cushman, 2013) and the political manoeuvrings whereby the imperial connections of the Arundel company were used to secure the British annexation of Banaba, after the licence to mine agreement was negotiated with the Banabans. This ensured the absence of government oversight to an agreement which was subsequently heavily criticised in mainstream press in respect of the unfair terms and ‘measly’ amounts paid to the Banabans, who received just 0.1% of the profits from the first 13 years of mining (Cushman, 2013, p. 127; Treagus, 2021).

The signing of the agreement set Banaba on its course of destruction, and it is unlikely that the Banaban signatories had any clear understanding of what was to ensue, while Ellis and his colleagues chose not to fully understand how authority functioned on the island (Treagus, 2021). The Europeans sought a king-like figure of authority to represent a Banaban community where men, women and children had land rights (Teaiwa, 2014), a patriarchal move reflecting the framing of Pacific Island societies as less sophisticated than European ones (Treagus, 2021).

Phosphate rock mining on Banaba was undertaken using open-cast mining which involves digging the phosphate rock out between calcified limestone columns which remain as sharp rocky pinnacles. The overall effect of the mined landscape is one of utter destruction, the exposure of the limestone pinnacles removes all soil and the jagged terrain left behind renders the land unusable and culturally unintelligible (Teaiwa, 2014). Initially, the surface was mined by manual methods but later became highly industrial and



Figure 17.1 Banaba mining field.

Photo credit: C. Alexander.

mechanised, eventually transferring over 22 million tonnes of material from Banaba – to be spread, piece by piece, over farms of New Zealand and Australia (Figure 17.1).

The incompatibility of the environmental damage from large-scale mining and the ability of the island's soils to produce food for a resident population was evident from the beginning. As early as 1912, the *Sydney Morning Herald* could foresee that the interests of mining and agriculture would inevitably require a 'fight for the survival or extinction of the phosphate quarrying industry ... either the phosphate industry has to go, or the whole population of the island, some 500, must be found some other abode' (*Sydney Morning Herald*, 1912). In 1913, the Banaban Fund was established 'for the purpose of purchasing and providing a new home for the settlement of the Banabans when the progress of phosphate mining in Ocean Island should render necessary their emigration from that island' (McAdam, 2013, p. 309). As mining progressed, life-sustaining resources on the island such as coconut and pandanus trees were quickly exhausted or destroyed, requiring freshwater, firewood (Press Association, 1961) and food to be shipped from New Zealand during the mining operations.

The unfair terms of the lease and the likely destruction of the island from mining were apparent to the Banabans, who quickly became aware that 'their lands and only means of existence would gradually disappear, leaving instead of ... palms and pandanus groves, only worked out quarries' (*Sydney Morning Herald*, 1912, as cited in Teaiwa, 2014). Unlike other Pacific Islands with collective land ownership systems, land on Banaba was owned individually (Teaiwa, 2014) and an integral part of the cultural and justice system. Banaba

was ‘not just a place to live, it was the basis of life in every way’ and the Banabans ‘wished to preserve the island for their descendants’ (Treagus, 2021, p. 112).

Banaban resistance to land sales and expansion of mining activity saw tactics such as forcible acquisition, emotional intimidation and manipulation employed, firstly by the Pacific Phosphate Company, latterly by the quasi state-run British Phosphate Commissioners (Cushman, 2013; Teaiwa, 2014; Treagus, 2021). The strategic interests of the Empire were positioned directly to the Banabans, notably in a classic case of manipulation ‘the Empire was “Holding out its hands to them, asking to be fed” written in a letter to the Banabans’ (Williams and MacDonald, 1985, p. 226; Teaiwa, 2014, p. 133; Treagus, 2021, p. 114). These elements of coercion led to a sense of victimhood, injustice and disempowerment. However, Banaban protest led all the way to the British High Court, with a landmark case including 206 days of court hearings and a trip of the entire High Court to Ocean Island (Baraclough, 1977).

The retention of a long-term supply of phosphate to support the development of agriculture in New Zealand and Australia was positioned as a national strategic interest from the start of mining (McAdam, 2013). These strategic interests were capitalised upon in the geopolitical shakeup following both world wars: after WWI, the Australian prime minister, Billy Hughes, after considerable political manoeuvring ensured that Nauru became a British territory and the mining operations at Nauru and Banaba were transferred to the control of the British Phosphate Commissioners, a new tripartite entity established to jointly run the mining industry, with a representative from each country on the commission. This would prove to become a turning point – responsibility for phosphate mining was transferred from the commercial auspices of the Pacific Islands Phosphate Company to an imperial power, Britain, and its two colonies, Australia and New Zealand. Henceforth, the exploitation of the island was undertaken with full political knowledge of the incompatibility of the Banaban situation – the mining of the island would render the island uninhabitable and the Banaban desire to remain self-sufficient and independent in their homeland could not both be met.

WWII saw Banaba taken by Japanese forces to control the phosphate mines and the Banabans subsequently moved to war camps. This point represents another critical juncture of Banaban history; with the island destroyed during the war and devoid of people, the British Phosphate Commissioners (BPC) took the opportunity to ensure that the entirety of the island could be mined by relocating the Banabans after the war to the island of Rabi, 2,000 km south in the Fijian group. Initially this was to be on a temporary two-year basis but later proved permanent, despite Banabans’ desire to return. The separation of the island from the Indigenous Banabans was then complete and over the next 30 years, 90% of the island’s surface was mined to create super-phosphate fertiliser for Australia and New Zealand farms. When mining ceased 22 million tonnes of phosphate had been removed, 17.7 million tonnes under colonial auspices with the Banabans receiving a 15% share of the profit (McAdam, 2013, Cushman, 2013, p. 129).

Much has been written about Australia’s role (McAdam, 2014; Teaiwa, 2014; Treagus, 2021) in the exploitation of Nauru and Banaba but what of New Zealand? Ostensibly the smaller partner, what was New Zealand’s role in supporting the exploitation of its Pacific neighbours? While New Zealanders had many employment opportunities on Banaba as part of the colonial administration, decision making and staffing of BPC employees were predominantly Australian, particularly after WWII. At times, however, New Zealand did play a key role in upholding phosphate interests in the face of Banaban protest beginning with

Albert Ellis' role as the inaugural New Zealand phosphate commissioner from 1921 to 1951. Next, we examine New Zealand's role specifically.

Following the colonial government's realisation of soil deficiencies in 1900 (Cushman, 2013), a secure supply of phosphate was seen as matter of national strategic interest in order to expand the economy and feed a growing colony. Use of superphosphate expanded the area able to be farmed into the hill country (Gale, 2019) with the New Zealand government's role in the provision of fertiliser considered by the sheep farming industry as 'a prime maxim of State policy' (The Press, 1956). The dairy industry in particular became almost entirely dependent on top-dressed pasture to maintain productivity (Gale, 2019).

As early as the 1950s, the long-term future of phosphate supplies were raised in the New Zealand Press Association writing:

The long term need for other nearby sources, new fertilisers, or more efficient methods of using phosphate is underlined by the prospect that faces New Zealand when she has to lean heavily on outside supplies. She will swing from a supply of the world's best and cheapest phosphate produced without profit or taxation almost at her front door, to a poorer grade, more expensive supply. 'This' said a spokesman in the industry today, 'would completely alter the economy and the standard of living of the New Zealand and Australian farmer'.

(New Zealand Press Association, 1956a)

Such was the strategic value of the phosphate industry to New Zealand and the Empire that Banaba was visited in 1960 by New Zealand government minister of agriculture (Mr Skinner), who acknowledged phosphate to be the 'lifeblood' of New Zealand's primary industry (NZPA, 1960). The late Duke of Edinburgh also visited in 1959, arriving on the Royal Yacht Britannia and, after spending seven hours ashore touring the facilities, noted the operation was a 'good example of how the Commonwealth works together for mutual benefits' (NZ Press, 1959).

At times boundaries between state governance functions and commercial enterprise were blurred due to the strategic national importance of phosphate supplies for the continued expansion and development of agricultural land in New Zealand. This became particularly evident during the 1961 strike over pay rates and working conditions by indentured Gilbertese phosphate workers on the island which led to a request from the Colonial Administration for naval support to act as a deterrent to the escalation of violence (New Zealand Herald, 1961a). Banaba was seen as being within New Zealand's 'sphere of Naval responsibility' (New Zealand Herald, 1961a). Within 12 hours of the request being received, the HMNZS Pukaki was dispatched in total secrecy with sailors, families and next of kin unaware of the destination or whether the sailing was simply an exercise for the newly recommissioned frigate ship (New Zealand Herald, 1961b). The strike was resolved without the Pukaki's direct intervention, but this exercise demonstrates the extremely close relationship during peacetime between sovereign power and extractive industry industrial relations considered to be in the 'national interest'. Further newspaper reports on the incident post-resolution downplayed the 'gunboat diplomacy' tactics, reporting that the government had no intention of using the ship for 'strike-breaking' purposes (NZ Press Association, 1961) but nevertheless the exercise remains an example of the willingness to present military force to maintain security of phosphate supply. Later, Banaban protest over the destruction of their homeland became stronger (see Figure 17.2).



Figure 17.2 Banaban protest gathering on Banaba, February 1979.

Photo credit: C. Alexander.

The mining of phosphate from Banaba and Nauru is arguably the most defining part of the enrichment of New Zealand's economy, the phosphate translating into meat, dairy and wool, making New Zealand wealthy at the expense of its Pacific neighbours (Teaiwa, 2014). When phosphate mining ceased with Banaban inclusion in a Kiribati state in 1979, New Zealand was presented with a challenge to find the next source of phosphate to fuel its economy. With so few sources of phosphate around the world the answer was, and still is, Morocco.

Continuing Imperialism – The Case Study of Western Sahara Phosphate and Morocco

The Kingdom of Morocco claims 75% of the world's phosphate reserves (Allan, 2016) and with key producers, such as the United States and China, currently retaining their supply domestically to protect food security (Chow, 2022) and trade restrictions on Russia following the Ukraine invasion, Moroccan production is a vital part of the global phosphate market with a near monopoly on a multi-billion US\$ annual trade. However, around 10% of that supply comes from neighbouring Western Sahara (Western Sahara Resource Watch, 2022), a resource-rich and contested land that Morocco has forcibly occupied for nearly 50 years, without legitimate sovereignty. Once again, we find a resource-rich area home to Indigenous people at the nexus of wider geopolitical influences due to the role of phosphate in food production.

The two largest New Zealand fertiliser co-operatives have sourced phosphate from Morocco since 1980 and continue to source phosphate from the disputed Western Sahara

region, despite the humanitarian dimension (Ballance, 2022; Ravensdown, 2022). Hence, the imperial precept of the use of non-renewable foreign natural resources to benefit New Zealand farmers and the New Zealand economy is still evident today in New Zealand's use of phosphate from Western Sahara. In this section, we look at how geopolitical power is used to withhold sovereignty over natural resources, thereby ensuring resource exploitation continues and creating a 'paradox of abundance' where poverty, unemployment, environmental degradation, water pollution take place in natural resource rich areas, 'which are appropriated and exploited through neo-colonial and imperialist relations' (Acosta, 2013; Hamouchene, 2021).

Western Sahara is one of Africa's last remaining matters of decolonisation. It is a piece of desert land about the size of New Zealand and home to the Sahrawi, nomadic tribesmen with a history of resisting colonial rule – first the Spanish and later the Moroccans. The colony was initially established by Spanish imperialists and merchants who developed a series of small, fortified settlements along the coast to benefit from the region's rich fisheries and trade with the Sahrawi tribes (Allan, 2016). The discovery of phosphate reserves saw Spain extend its influence over Western Sahara through provincialisation, deepening colonisation (Allan et al., 2021), and resulting in the exploitation of the Indigenous Sahrawi as a cheap labour force for the phosphate mining and fishing industries (Allan, 2016).

The immense PhosBoucras mine was established in 1968 by the Spanish state mining company EMINSA (later FOSBUCRA) and includes the world's largest conveyer belt (some 96 km long) to transport the crushed phosphate to the Atlantic ports for export (Allan, 2016). Each year between 1.1 and 1.4 million tonnes of phosphate are shipped from Western Sahara, with an estimated value in 2021 of US\$349 million (Western Sahara Resource Watch, 2022).

Pressure from the United Nations to promote self-determination and accelerate decolonisation around the globe began after WWII. Much of Africa completed this process in the period from 1945 to 1960. In 1963, Spanish Sahara was identified as a Non-Self-Governing Territory by the United Nations, with Spain as the administering power. The withdrawal of Spain from Western Sahara looked imminent in 1975, and a referendum was to be held to determine the status of the region. This should have signalled a roadmap to decolonisation and the beginning of independence for the Indigenous Sahrawi people. Instead, the late Moroccan King Hassan II, who had earlier laid claim to the territory, rejected the referendum and, in a pre-emptive move, ordered the settling of 350,000 Moroccan civilians on Western Sahara on November 6, 1975, to force Spain to hand over the disputed region (Corell, 2015). This became known as the 'Green March' and was subsequently followed up with a tri-partite agreement (the Madrid Accords) between Spain, Morocco and Mauritania, whereby the powers and responsibilities of Spain, as administering power of the territory, were transferred to a temporary tri-partite administration. The Madrid Accords awarded Morocco and Mauritania the resource-rich areas of Western Sahara territory, in violation of the 1975 International Court of Justice declaration that neither had territorial sovereignty over the Western Sahara (International Court of Justice, 1975).

Morocco's occupation split Western Sahara and, with successive land grabs, Morocco now controls 80% of the region, including all of the coastal and resource-rich areas. The Indigenous Sahrawi are left with the barren, arid interior – land that is unable to support their people. Over time, Morocco has cemented its occupation with a 2,700 km sand berm, complete with mines, barbed wire and military patrols. Resistance fighting by the Polisario, the political arm of the Indigenous Sahrawi independence movement, against the unlawful

Moroccan occupation resulted in a 16-year guerrilla war which led to the displacement of thousands of Sahrawi to Algerian refugee camps. The United Nations brokered an end to the conflict in 1991, premised on a referendum on self-determination, which never occurred, due to disagreement over the terms and eligibility to participate. This left the final status of the territory unresolved in a ‘frozen conflict’, a position which only consolidated Moroccan interests over time. Consequently, over 180,000 Sahrawi refugees live in Algerian refugee camps today, in harsh desert conditions and reliant on humanitarian assistance for their survival due to the limited opportunities for self-reliance (Allan et al., 2021).

Despite the occupation largely not recognised internationally, Western Sahara’s rich fishing and phosphate resources continue to be illegally exploited by Morocco. The legality of the phosphate extraction rests upon United Nations’ legal advice stating that exploitation activities in Non-Self-Governing Territories such as Western Sahara can legally proceed where they benefit the peoples of those Territories and are undertaken in consultation with their representatives (United Nations Legal Counsel, 2002). Bringing to mind the conception of extractivism in the guise of ‘development’ (Morris, 2019), the Moroccan kingdom asserts that the exploitation is legal on the basis of reinvestment in development projects in the region, which benefit the local ‘population’. However, the benefits have largely gone to Moroccan settlers and the authorities, while the Indigenous Sahrawi ‘people’ have lost sovereignty over their resources.

There have been numerous legal setbacks over Morocco’s claims to Western Sahara, with the EU General Court cancelling trade and fisheries agreements with Morocco that included Western Sahara, on the basis that the consent of the people of Western Sahara had not been obtained (General Court of the European Union, 2021). Awareness raising campaigns by civil society groups on the human rights injustices under the occupation also pressured European investors into divesting from companies buying resources from the area (López-Ruiz, 2021).

The UN Mission for the Referendum in Sahara (MINURSO) sought to reach a negotiated solution with Morocco and the Polisario that respects UN norms of decolonising non-self-governing territories (MINURSO, 2022). This assumed a solution between integration into Morocco or independent statehood. Morocco pressed for the region to have self-governing autonomy; however, this ignores that the Sahrawis would be integrated into an autocratic system with a history of suppressing their nationalism, human rights and political agency.

Morocco continues its policy of using resource extraction, energy production and trade relations to build ‘soft power’ and legitimacy for its rule in Western Sahara (Allan et al., 2021), with tacit support from Europe and America (Mundy, 2022; Allan & Ojeda-Garcia, 2021). This has included deals with the EU over fishing and agriculture and, more recently, energy. In late 2020, an American-brokered trade deal to normalise relations between Morocco and Israel notably included American recognition of Moroccan sovereignty over Western Sahara, placing the US at odds with the international community (AJIL, 2021). The effect of this latter agreement was to ‘unfreeze’ the 29-year stalemate, with the Polisario declaring an end to the UN-brokered ceasefire agreement, signalling a return to armed struggle for self-determination and a complete Moroccan withdrawal from Western Sahara. Since 2020, there have been repeated clashes between Morocco’s military and the Polisario, and broadening diplomatic disputes between neighbours Spain, Algeria and Morocco. The Moroccan precedence on the issue is reflected in a speech made by King Mohammed VI calling the issue ‘the prism through which Morocco views its international environment’ (AFP, 2022).

The 2022 invasion of Ukraine and subsequent international trade restrictions on Russia, a global fertiliser and energy exporter, has seen expanding ramifications across the globe.

The demand for Moroccan phosphate has spiked as countries pivot supply to ensure food security amid rising global fertiliser prices (Bouanani, 2022). These wider geopolitical influences reinforce Moroccan interests in Western Sahara and with continued American support (and latterly that of Spain and Germany via trade relationships) of Moroccan sovereignty over Western Sahara there is no sign of an end to the intensifying geo-political conflict.

Against this backdrop of human rights and sovereignty issues, New Zealand continues its trade for phosphate, becoming the last Western democracy to source phosphate from the Western Sahara (Western Sahara Resource Watch, 2022). The two largest New Zealand farmer-owned cooperatives supply 98% of New Zealand's super-phosphate fertiliser and have sourced over 70% of their phosphorus from the Phosboucra mine in Western Sahara, a Moroccan state-owned company (Mitchell, 2018; Fertiliser Association, n.d.). The trade from New Zealand represents approximately 22% of the phosphate exports from Western Sahara (Western Sahara Resource Watch, 2022). The cooperatives argue that replacing Western Sahara phosphate is difficult because its specific chemical properties are particularly suited to New Zealand soils, being low in cadmium and high in phosphorus (Melville, 2019; Ballance, 2022; Ravensdown, 2022). However, from 2019 onwards, one of the co-operatives, Ravensdown, has significantly reduced its supply from Western Sahara. Superphosphate is the main fertiliser applied to agricultural land, with sheep and beef farms the largest users (Stats NZ, 2021). The farming co-operatives have made significant investments in fertiliser facilities around New Zealand and, in an echo of the statements made by the Minister of Agriculture in the 1950's (New Zealand Press Association, 1956a), state that without phosphate fertilisers New Zealand rural production would fall at least 50% which equates to a \$10 billion per year hit to the economy (Melville, 2019; Ravensdown, 2022).

Once again, the need of New Zealand's agricultural economy is positioned against the human rights of an Indigenous people to exploit the natural resources in their homeland for their own benefit. The New Zealand government generally takes a position to support the United Nations and promote self-determination and it has provided full support to MINURSO. Importing phosphate from Western Sahara has attracted criticism globally and companies in other countries stopped sourcing resources in the region (Western Sahara Resource Watch, 2022). However, New Zealand, India and Mexico continue to source over 92% of the entire trade from Western Sahara (Western Sahara Resource Watch, 2022). Both New Zealand fertiliser companies contend they are acting morally and legally sourcing phosphate from Western Sahara, stating that they are 'not immune' to the humanitarian dimension (Melville, 2019). They contend the issue is for the UN to resolve, relying on the premise of employment opportunities and infrastructure development to benefit the local population (Ballance, 2022; Ravensdown, 2022). However, this position neatly sidesteps the ethical issue of the trade continuing to support a regime via a state-owned company that has used violence and unlawful occupation to exploit the resources of a region with little recourse to the Indigenous people of the land. Unlike the European investment funds, the farmer-owned cooperative governance model is particularly resistant (though not immune) to social pressure.

The position of reputational risk has been tested in the New Zealand High Court. Representatives for the Polisario Front took the NZ Superannuation Fund to court over its investment interests in companies with premises in Western Sahara and New Zealand farms supplied by one of the New Zealand fertiliser companies sourcing Western Saharan phosphate (New Zealand High Court, 2021). The landmark court case found that New Zealand pension fund had acted ethically and responsibly in dealing with companies that use phosphates from

Western Sahara, recognising that a reputational risk remains but potentially giving confidence to investors considering the region as a new source of investments and exports.

Discussion and Conclusion

Extractivism is rooted in the hegemonic order of global capitalism, existing at the intersection of economic growth and environmental protection. Extractivism is not merely a past instance, an echo of colonisation and empirical dominance. Despite the modern era of globalisation the destruction at resource frontiers remains largely invisible to the distant users of commodities (Durante et al., 2021). The continuing role of the state in resource extractivism is crucial to its agency. We argue that colonial and post-colonial New Zealand has practised extractive imperialism with impunity. Colonisation was predicated on exporting agricultural produce and resources, and adoption of European farming methods necessitated reliance on mechanisation and chemical inputs. The intensive use of chemical inputs (fertiliser and pesticides) to sustain crop production is extractivist in terms of the depletion of non-renewable phosphorus inputs. Hickel et al., contend that ‘the wealthy nations of the global North continue to rely on extraction to finance economic growth and sustain high levels of consumption’ (Hickel et al., 2021, p. 1030).

There is an absence of knowledge among the New Zealand public of the relationship with the sources of phosphate used to fertilise our farms, both in a historical sense of the Micronesian islands of Nauru and Banaba and current operations in Western Sahara. The critical role of phosphorus in agricultural production necessitates securing and maintaining a reliable source and has even been deemed a matter of national security. The value of that strategic importance of phosphate to farming and, in turn, the New Zealand economy, obscures the environmental degradation and human rights injustices that have occurred and continue to occur.

We contend that the role of the state is essential in establishing and continuing economic imperialism. In New Zealand, this has extended to granting privileges to certain non-state institutions, such as farming cooperatives. The New Zealand government has legitimised extractivism through emphasising the dependency of the country’s farming sector (and key source of its wealth) on phosphate resources, while downplaying its historic role in the destruction of Banaba, ignoring its responsibility for future rehabilitation and remaining silent on fertiliser co-operatives sourcing phosphate from Western Sahara despite government support of MINURSO. We highlight the political economy of extractivism, establishing not just the strength of the role played by government but also how the state promotes investments in extractivism. Historically, this can be seen in the New Zealand government’s show of force by sending a frigate ship during a workers’ rebellion on Banaba Island in the late 1960s, and in the contemporary context, government silence on human rights issues, despite being at odds with official government policy.

The cases of Banaba and Western Sahara bear all the environmental and cultural traits of resource extractivism at its zenith – appropriation and export of large volumes of material and/or with high intensity and limited processing, leading to irreversible soil depletion, biodiversity and ecosystem loss, climate change, loss of food sovereignty and contamination of freshwater (Gudynas, 2018). There are also cultural, socio-economic and political consequences for the Banaban and Sahrawi people – who both endured forcible relocation from and dispossession of their homeland. In the case of Banaba, this is exacerbated by the inability or unwillingness of former colonisers to support the return of

Banabans to their homeland. Over the years, several mining companies have expressed interest in removing the Banaban phosphate that remains, the most recent proposal in the guise of ‘rehabilitation’.

The world’s population is expected to grow by 2 billion over the next 30 years to reach 9.7 billion in 2050 (United Nations, 2021). Feeding the world requires phosphate, with 90% of the global demand for phosphorus coming from food production. Unless major changes to agriculture are rapidly developed, demand for phosphorus will continue to increase in the future. Countries with supplies and a large agricultural sector, such as the United States, China and Russia, are likely to use them domestically, placing more geopolitical pressure on areas like Western Sahara and Morocco to meet the world’s needs. Over time, global food production will be reliant on trade with Morocco.

Clearly, the trade of phosphate has global geopolitical consequences. The environmental justice, human rights and sovereignty issues brought about by phosphate extractivism are positioned against global food security. However, the extraction and production of phosphates, a key component in agricultural fertilisers, feeds global agrarian capitalism (Cordell, 2009; Teaiwa, 2014; Hamouchene, 2021) which is supported through political, military and economic pressure. Colonial and imperialist hegemony enabled extractivist models to operate modes of accumulation of private capital through dispossession of land and water to gain access to natural resources. The inequalities that arose through imperialism continue to be reproduced by neoliberal nations reliant on the export of their primary commodities, including agricultural produce.

Teaiwa (2014) notes that phosphate mining fundamentally changes the trajectories of dispossessed Indigenous populations, from living sustainable, independent livelihoods on their land for generations to having vastly reduced agency in a global economic system of resource exploitation that limits the benefits accruing to them. Materials for a built and manufactured environment are thus extracted at the expense of the natural environment and remote communities. The costs are paid by these communities and future generations.

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