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以永續發展的觀點重新思考：  
從原住民的角度對全球永續發展和環境正義  
框架進行批判性研究——以臺灣富世亞洲水泥案為例

Rethinking Sustainable Development: A Critical  
Examination of Global Sustainability and Environmental  
Justice Frameworks from an Indigenous Perspective in  
the Asia Cement Case in Fushi, Taiwan

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National Taiwan University Master Thesis  
Oral Examination Committee Approval



以永續發展的觀點重新思考：從原住民的角度對全球永續發展和環境正義框架進行批判性研究——以臺灣富世亞洲水泥案為例


Rethinking Sustainable Development: A Critical Examination of Global Sustainability and Environmental Justice Frameworks from an Indigenous Perspective in the Asia Cement Case in Fushi, Taiwan

本論文係費麗嘉 (R10247019) 在國立臺灣大學氣候變遷與永續發展國際學位學程完成之碩士學位論文，於民國 2023 年 05 月 30 日承下列考試委員審查通過及口試及格，特此證明。


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## 摘要

最近，國際社會開始呼籲永續發展（SD），以避免目前人類活動在地球上留下不永續的軌跡。台灣已將永續發展列為優先，努力與全球接軌。一個例子是成立於1997年的國家永續發展委員會（NCSD）。每年，NCSD會透過頒發國家永續發展獎（NCSD網站）來表揚在永續發展目標方面具傑出貢獻，且致力提高全國永續意識的教育和公民組織、政府機構和企業。

2022年，NCSD頒發國家永續發展獎於亞洲水泥股份有限公司（ACC）。除了NCSD獎項外，ACC還多次獲得國內外認可，成為一個體現和優先考量SD的公司。然而，在全球一片讚譽下，花蓮縣富世地區的原住民太魯閣（Truku）族玻士岸（Bsngan）部落成員正在領導一場持續進行的運動，抗議ACC在他們社區的採礦活動。ACC的反對者認為，採礦做法不僅不永續且非法，由於該公司佔據了原住民土地，嚴重威脅著Truku族的福祉和生計。這些抗議活動與ACC因其在運營中優先考慮SD而獲得的讚譽形成了鮮明對比。

通過以富世的ACC案例為例，我對全球的SD定義和框架進行批判性審視，以評估它們是否符合當地原住民社區的需求。我提出了一個理論架構，其中考量包含永續性及永續發展的原住民知識，以對原住民和ACC在SD方面的歷史分析和文件進行分析。我的研究發現，Truku族Bsngan部落人民一再遭受由ACC在富世進行的殖民主義引起的環境不正義。ACC今天提出的SD倡議沒有解決這種土地和環境不正義，反而延續了這些不正義。

根據我的研究結果，我認為「永續性」的定義和理解可能並不是普遍適用的，特別是考慮到原住民社區的需求。要實現未來的SD途徑，必須透過合作的原住民主導發展來解決環境不公正，重點關注原住民概念或替代方案。為了在亞洲水泥案例中實現這一願景，社區成員、當地領導者和研究人員應該採用行動性研究，進一步構思和實施一種以Truku族Bsngan部落和其他Truku族成員需求為首要考慮的SD形式。

關鍵詞：原住民永續發展，原住民環境正義，土地不公正，亞洲水泥案例，Truku族，台灣



## Abstract

Recently, the international community has issued a call for Sustainable Development (SD) to prevent the current unsustainable trajectory of human activities on Earth. Taiwan has prioritized pursuing SD in conjunction with global efforts. One example of these efforts is National Council for Sustainable Development (NCSD), established in 1997. Each year, the NCSD recognizes education and civic organizations, governmental agencies, and corporations that have made outstanding contributions to the goals of SD and have helped raise awareness nationwide with the National Sustainable Development Award (NCSD Website).

In 2022, the NCSD awarded Asia Cement Corporation (ACC) the National Sustainable Development Award. In addition to the NCSD award, ACC has repeatedly received national and international recognition for being a company that embodies and prioritizes SD. However, amidst this global acclamation, members of the Bsngan Truku Tribe, an Indigenous group in Fushi, Hualien, are leading an ongoing movement to protest ACC's mining operations in their community. Opponents of ACC argue that mining practices are not only unsustainable but also illegal because the company is occupying Indigenous lands and posing a serious threat to the wellbeing and livelihood of the Truku peoples. These protests starkly contrast the acclimation ACC has received for prioritizing SD in their operations.

By using the ACC case in Fushi as an example, I critically examine global definitions and frameworks of SD to assess whether they meet the needs of local Indigenous communities. I propose a theoretical framework of Indigenous knowledge regarding sustainability and SD to conduct a historical analysis and document analysis of Truku and ACC publications addressing SD. My findings reveal that the Truku peoples have repeatedly experienced environmental injustice through settler colonialism, perpetuated through Asia Cement's mining operations in Fushi. Instead of resolving this land and environmental injustice, SD initiatives proposed by ACC today instead perpetuate these injustices.

Based on my research findings, I argue definitions and understandings of 'sustainability' may not be universally applicable, particularly when considering the needs of Indigenous communities. To achieve pathways for future sustainability, it is crucial to address environmental injustice through collaborative, Indigenous-led development that centers Indigenous concepts or alternatives to SD. In order to realize this vision in the case of Asia Cement, community members, local leaders, and researchers should employ action-based research to further conceptualize and implement a form of SD that prioritizes, first and foremost, the needs of the Bsngan tribe and other Truku tribal members.

Keywords: Indigenous SD, Indigenous EJ, Land Injustice, Asia Cement Case, Truku, Taiwan



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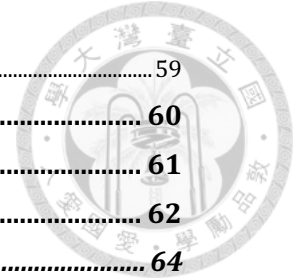
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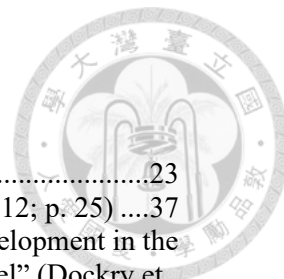
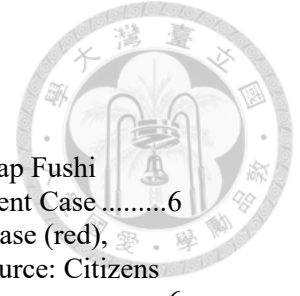


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# 1: Asia Cement Case (亞泥案) Introduction and Background

## Research Introduction

On the Morning of February 12th, 2022, I found myself standing across the street from Fushi Elementary School where I taught English for a year back in 2018, but this time, for a very different reason. I was standing in a parking lot, watching and awaiting the outcome of a vote held by the Bsngan Truku Tribal Council as to whether or not to allow Asia Cement Corporation (ACC) to extend their lease for another twenty years and to continue mining in the Fushi Village. Looming overhead, quite literally, was the Xincheng Mountain ACC mine. At the entrance to the polling area were several tribal members holding signs both in support of and against future mining, shouting out to the voters to consider their positions. Reporters clustered in front of polls with cameras flashing while more than twenty police officers stood stiffly beside the building.

This morning, February 12, was a historic day in the Asia Cement Case. Following decades of protest, several lawsuits, and a series of investigations and negotiations, members of the Bsngan Tribe were deciding the fate of future mining in their community. And yet, while this day supposedly represented tribal autonomy and freedom to determine whether or not to permit ACC to continue business as usual, there was a somber mood and discontent from some of the most outspoken activists in this case. When all of the votes were accounted for, the community overwhelming voted to allow future mining. While ACC shared its support for the decision on their social media and website, activists who opposed mining operations posted on the Anti-Asia Cement Facebook page that they weren't done fighting for their land and future.

Although the Bsngan Tribe consented to allow future mining, there are still many unanswered questions. For example, would the upcoming revisions to Taiwan's Mining Law affect the voting outcome? Would the months of investigations and negotiations leading up to the vote have any impact on future mining operations? Would the outcome



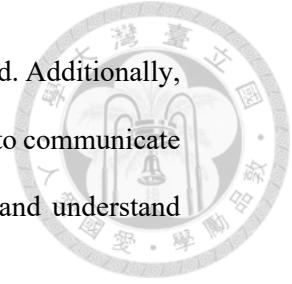
of this case set a precedent and affect similar cases across Taiwan regarding Indigenous land rights? To this day, these questions remain unanswered, indicating that the Asia Cement Case is far from being resolved.

I first learned about this case during the time I was teaching English at Fushi Elementary school. The daily reminders of mining operations, including the sounds of digging and blasts overheard from my classroom, daily dust settling on my desk, and truck after truck transporting the mined material out of the mountains to the factory for transport, were impossible to ignore. Although I was teaching English, my undergraduate studies were in Environmental Studies, particularly related to the relationship between environment and society. As I learned about this case from news reports, conversations with coworkers, and observations, I realized this case directly affected the environment and Truku Indigenous Tribe that lived under the mine.

In 2021 I decided to come back and further learn about and study this case as part of my MS program. In the next two years I spent completing my studies, I attempted to make sense of this case through a deep dive into Indigenous theoretical frameworks, news reports, investigation reports, and historical documents. Additionally, I engaged in casual conversations with stakeholders, attended presentations and conferences, and spent time further observing mining operations. The question that I have attempted to answer through this work is,

*“Is Indigenous SD achieved in the Asia Cement Case for the Bsngan Truku People and ACC?”*

One of my main takeaways from writing this thesis is there is much I can never know. I acknowledge that my research methodologies have several limitations that I would like to address. Firstly, while I have some proficiency in speaking and reading Chinese, my language capabilities are limited. As a result, my ability to effectively



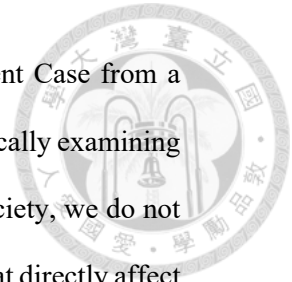
communicate with stakeholders and read sources in Chinese was restricted. Additionally, I do not have knowledge of the Truku language, which limited my ability to communicate with elders for whom Truku is their first language, as well as access and understand sources in the Truku language.

Secondly, I conducted this research between 2021 and 2023 while completing my studies at National Taiwan University. This two-year timeframe imposed limitations on the depth of my analysis. Furthermore, due to Covid-19 policy measures, I was unable to arrive in Taiwan until November of my first year of study. Moreover, during my second year of study, I faced restrictions on travel and research due to a quasi-lockdown implemented by the Taiwanese government in response to the escalating severity of the pandemic.

Considering these limitations, I chose to employ document analysis as my primary methodology, guided by input and recommendations from stakeholders in this case. I am aware that this methodology restricts the scope of my findings, as I was unable to conduct extensive fieldwork or interview community members. If I were to pursue further research, I would use the findings from this thesis as a starting point for community-driven, action-based research that involves collaboration and inclusion of Bsnagan Truku Tribal members.

Lastly, and most importantly, I want to emphasize that I am not Indigenous, and therefore, I can never fully comprehend the colonial conditions and injustices represented by the Asia Cement Case, as it is not my lived experience. Hence, my analysis relies on the writings and perspectives of Indigenous peoples who possess this lived experience in order to enhance my understanding and inform my analysis.

Yet I hope that what I have pieced together in this thesis, using my knowledge of sustainability frameworks and my awareness of Indigenous knowledge relating to EJ and

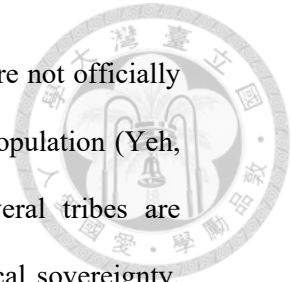


SD beyond Taiwan, contributes to the understanding of the Asia Cement Case from a standpoint of SD and EJ. I believe my work reveals the importance of critically examining proposed pathways for SD before employing them to ensure that as a society, we do not perpetuate or create future environmental injustices, especially in cases that directly affect Indigenous stakeholders. Above all, I hope that my findings offer a clear example of why frameworks for SD employed by corporations, governments, and even countries need to adopt a more holistic perspective and center development on the needs of local communities, critically, Indigenous communities.

I have divided my research into five chapters. In this chapter, I will provide background information necessary to understand this case. This includes introducing Indigenous peoples in Taiwan, discussing the present-day status of Indigenous rights, as well as providing an overview of the Truku Peoples and the site of the Asia Cement Case and a timeline of significant events in the Asia Cement Case leading up to the present day. The subsequent chapter is my literature review and theoretical framework, designed with the primary goal to understand Indigenous futurity and conceptions of SD. In chapter three, I provide a historical overview that explains how the Asia Cement Case is an environmental injustice and why Indigenous SD and EJ are necessary to address this injustice. In chapter four, I compare and contrast the Truku Bsnagan Tribe's and ACC's visions for SD through document analysis. I conclude this thesis with recommendations for pursuing Indigenous SD and the larger implication of this case for Taiwan and beyond.

### **Taiwan's Indigenous Peoples**

Taiwan's Indigenous peoples make up approximately two percent of the total population and predominantly occupy Taiwan's east coast today (Shih, 2021, p. ix). In total, the Taiwanese government officially recognizes sixteen tribes, but there are several



other Indigenous groups (such as the Pingpu Indigenous Peoples) that are not officially recognized by the state which makes it difficult to pinpoint the exact population (Yeh, 2021). Furthermore, an important distinction to make is while several tribes are recognized by the central government, they are still fighting for political sovereignty. Tribal councils and governments of Indigenous groups in Taiwan are not always recognized by the Taiwanese government as legitimate (Ciwang, 2017, p. 15).

The Truku peoples, the Indigenous group that this thesis concerns, were officially recognized as a tribe in 2004.<sup>1</sup> As of 2020, the present day Truku population is about 32,000 people (Council of Indigenous peoples, 2020). During the pre-colonial era, the Central Mountain Range of Taiwan, which now constitutes Nantou County, was home to over 110 distinct tribes (Ru, 2010, p. 83; Ciwang, 2017, p.7). As the Truku population increased, they gradually relocated to the eastern side of the Central Mountain Range with many living in what is now designated as Taroko Gorge National Park. Colonization resulted in the forceful relocation of the vast majority of Truku tribal members to their present-day location in tribal villages in the flatlands of Hualien County. Today the Truku people predominantly live in Xiulin Township, Wanrong Township, Zhuoxi Township and Jian Township. The Asia Cement case particularly affects the Truku people living in Xiulin Township and more specifically, members of the Bsngan Tribe located in Fushi village (see images below).

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<sup>1</sup> Before 2004, the Truku were classified as part of the Atayal. Though these two tribes are different in many ways, they share some of the same history. Thus, while this thesis refers to the history of the Truku peoples, many historical events also included the Atayal and the Sediq, another independent tribe that separated from the Atayal in 2008 (CIP). In this thesis Truku refers to the Tribe, Taroko refers to the National Park.

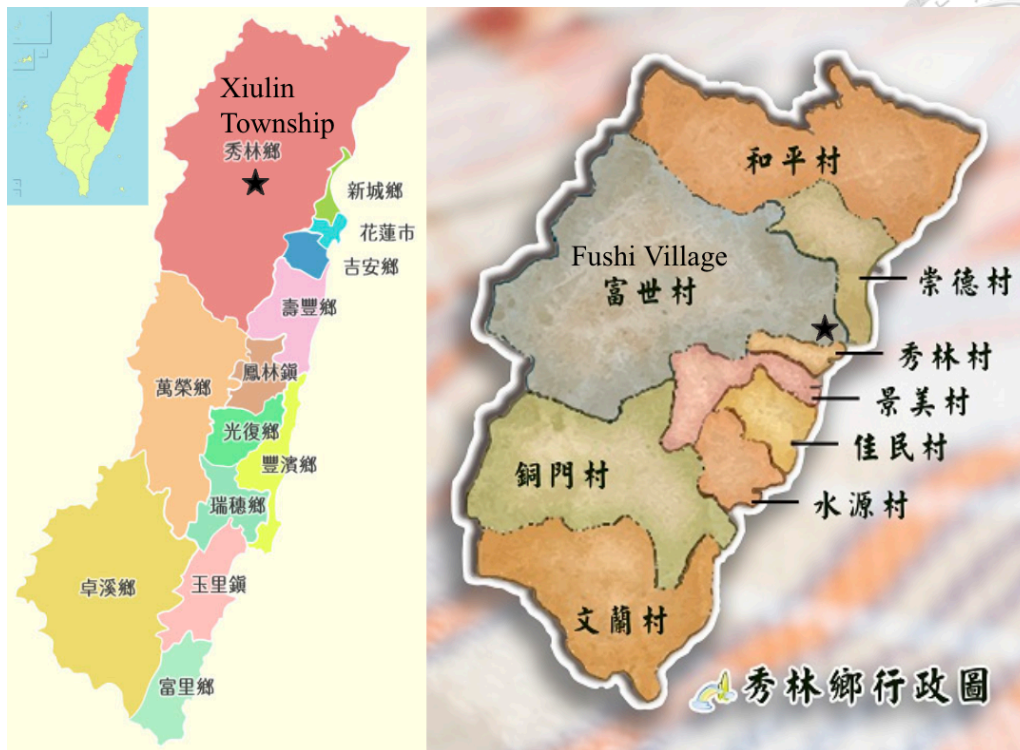


Image 1: (Left) Xiulin Township in Hualien County, Taiwan; (Right) map Fushi Village in Xiulin, star denotes the approximate location of the Asia Cement Case

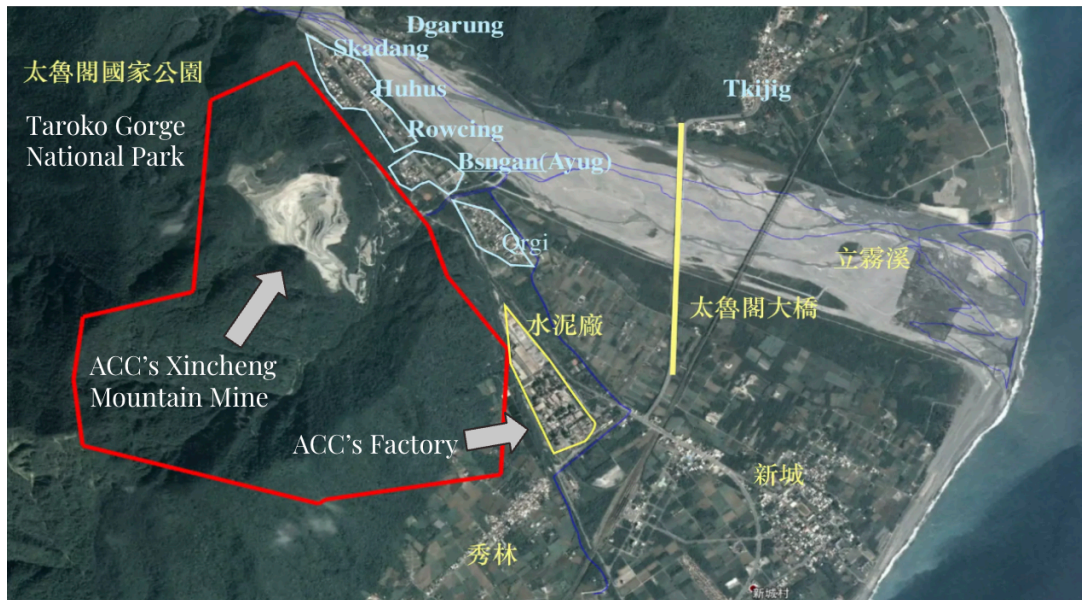
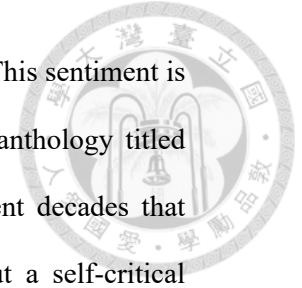


Image 2: smaller tribes of the larger Bsngan Tribe (blue), ACC's land lease (red), highlighting the site of ACC's Xincheng Mountain mine and factory (Source: Citizens of the Earth)

Although the country of Taiwan today declares itself independent and free from the colonial powers that previously ruled the island, it is crucial to recognize that



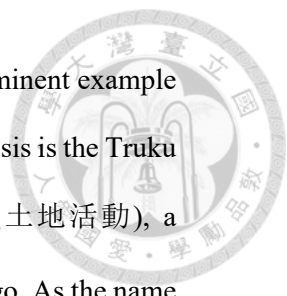
Indigenous peoples in Taiwan still live in a state of settler colonialism. This sentiment is highlighted in a quote from the introduction to a recently published anthology titled *Indigenous Knowledge in Taiwan and Beyond*, “It was not until recent decades that indigeneity has acquired visibility in public discourse in Taiwan, but a self-critical examination of settler colonialism as an ongoing colonial structure by the settlers continues to be very limited” (Shih, p. xiii, 2021). While it is true that Indigeneity has gained visibility and governmental recognition in Taiwan, with two particularly prominent examples being the establishment of the Indigenous People’s Basic Law in 2005 promising Indigenous self-determination and autonomy and current President Tsai Ing-wen’s official apology to Indigenous groups in 2016, the ongoing settler colonialism is abundantly clear to Indigenous communities who are continually engaged in battles for land rights, hunting rights, and the power to determine their futures beyond the control of the colonial state (Office of the President, 2016).<sup>2</sup> Indigenous groups in Taiwan in particular face an added layer of ongoing colonialism in the escalating pressure from China to claim Taiwan as its territory. While the effects of this increasing pressure manifest in several different ways for Indigenous communities, one particular way is that by preventing other countries from officially acknowledging Taiwan as a country and barring Taiwanese participation in international conventions such as the United Nations, Indigenous peoples in Taiwan have limited power to elevate and address their status as sovereign entities living under settler colonialism.

In the face of this multi-layered settler colonialism, resistance has been powerful and continues to this day through many avenues in Taiwan including the “Return My Land” movement and through the resurgence and revitalization of Indigenous knowledge

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<sup>2</sup> For the content of President Tsai’s speech, follow this link: <https://english.president.gov.tw/NEWS/4950#:~:text=I%20do%20not%20expect%20any,on%20the%20p ath%20towards%20reconciliation.>





systems throughout the country (Yang, 2021, p. 204). A particularly prominent example of resistance to settler colonialism in Taiwan and the focal point of this thesis is the Truku Anti-Asia Cement Return My Land Movement (太魯閣反亞泥還我土地活動), a movement that began in Fushi Village, Hualien more than twenty years ago. As the name implies, this movement was a response to ACC's mining operations in Xincheng Township on Truku Bsngan Tribal lands, calling for the return of land to the Truku landowners and the termination of mining activity. This movement resulted in greater national and international awareness of ongoing settler colonialism in Taiwan, and furthermore, in this thesis I will argue that the implications of this movement exposed a direct link between settler colonialism, land dispossession, and environmental injustice for the Truku peoples.

In this thesis, I will seek to understand a particular outcome of the Anti-Asia Cement Return My Land movement. By proposing an alternative future for the Truku villages surrounding the mining site, the movement has unearthed complex and seemingly conflicting opinions among community members about the best and most 'sustainable' path forward for the Bsngan tribe. Today, many Truku people stand on opposite sides of an ongoing battle as to whether or not ACC should continue mining operations. But in truth, a simple yes or no answer fails to account for the complexities of this decision and all of the factors that must be carefully weighed and evaluated. In fact, many Truku people believe some information crucial to making this decision has been withheld or not thoroughly investigated. Through this research, I argue that Truku villagers' differing opinions or visions of the future of mining are in fact related and ultimately striving for the same goal: securing Bsngan Tribal Futurity through conceptions of Indigenous SD. I furthermore argue that this Indigenous version of SD is

very different than the SD that ACC is pursuing through their sustainability vision and practices.



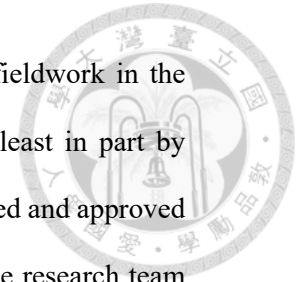
### **AAC's Xincheng Mining Operations History**

The history of the Asia Cement Case and the Truku Anti-Asia Cement Return My Land Movement spans a period of several decades and while there has been ample research and documentation, constructing a thorough timeline of events is complicated due to a lack of transparency on the part of the government and ACC, as well as differing accounts about how events actually happened. Furthermore, knowledge is colonized and more often than not, publications fail to account for the perspective or facts as perceived by historically marginalized groups such as in this case, the Truku peoples (Smith, 2005). That being said, I believe establishing a timeline provides important context to fully recognize the nuances and scope of injustice that is felt today by the Truku peoples. While this section only details events directly concerning the relationship between ACC and the Truku peoples for the purpose of introducing this case study, in later chapters, I will outline a thorough history of environmental injustice experienced by the Truku to reveal how this case fits into a larger history of colonialism and injustice.

A report officially published in 2022 by the Executive Yuan investigating the historic truth of what happened to the land that ACC today leases, the “Truth Investigation Report” (亞洲水泥股份有限公司新城山礦場租用原住民族土地真相調查報告), informed a large portion of this section (Truth Investigation Report, 2022).<sup>3</sup> The reason I selected this report as an important source is because it was written and thoroughly researched by a team consisting of Tribal representatives, government officials,

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<sup>3</sup> In this thesis, I will refer to this report as the “Truth Investigation Report”. A full copy of this report can be found here: <https://www.cip.gov.tw/data/news/202206/T-77058322.pdf?s=C5AB8772BEAF950&c=3446F28400F17924F3D6DC1C8BBEE2DC&fn=DE22566E9281E1288125558B9EAB1243114981A39808E884F5F5E8419DA40C54117EA23817EC078DD48A62C8B9D742FB5F812AD74DB9F1340BE609BEDFAFC642>



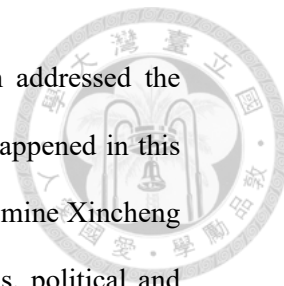
professors, and representatives from ACC. It also includes extensive fieldwork in the community surrounding the Xincheng Mountain mine, carried out at least in part by Indigenous researchers. While most of the report’s contents were reviewed and approved by all research team members, it is worth noting that the majority of the research team felt that the final chapter outlining recommendations was not appropriately reviewed or approved by the team when it was published by the Executive Yuan. In fact, several team members issued a joint statement claiming that the findings of no wrongdoing or illegal activities do not correspond to the truth discovered throughout the other chapters of the report (Wang, 2022).<sup>4</sup>

### **Acquisition of Mining Rights**

ACC was first established in 1957 in response to the Taiwanese government’s second four-year economic development and in 1973, opened their first east coast mine in Xincheng, Hualien (Asia Cement Corporation). A different corporation previously established the preliminary rights for this mining site for the time period 1957-1977 and while these rights were transferred to ACC, there were still several steps they needed to complete in order to officially establish a legal mining operation according to Taiwan’s Mining Law at the time (Truth Investigation Report, 2022, p. 37). Each of these steps in one way or another led back to one main question: Who had ‘land ownership’? This was because in order to obtain a mining license or title, designate the mining area, or establish a lease document and plan, in addition to official government approval, ACC needed to have approval from the people who owned the land. However, answering the question of ‘land ownership’ for ACC was by no means straightforward due to the long history of colonization and Indigenous land dispossession in Fushi Village.

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<sup>4</sup> For information about this statement, refer to this article <https://www.rti.org.tw/news/view/id/2124558>

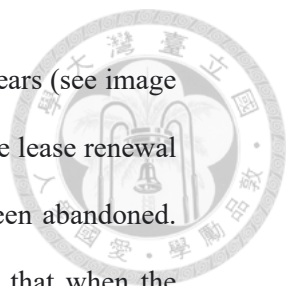


As part of their research, the Truth Investigation Report team addressed the question of land ownership, arguing that to uncover the truth of what happened in this case and whether or not the way ACC established the rights to lease and mine Xincheng Mountain was done in a just way, history, culture, Indigenous customs, political and economic background, development studies, and legal anthropology all needed to be employed (Truth Investigation Report, p. 9). These authors actively tried to avoid working within a legal framework, as this would limit this investigation to evaluating legal cases between ACC, the government, and the Truku peoples. However, in 1973, there was no fact-finding team and despite concerns by villagers about improper compensation that had been promised in consultation meetings, document forgery complaints and testaments that information had been withheld or never translated to the Truku language, the lease was approved by the local township office.

One important detail that I will explain further in chapter two of thesis is that the land leased by ACC for mining was categorized by the central government as ‘mountain reserve land’ (ibid, p. 163). In order for ACC to legally lease land that is part of the ‘mountain reserve’ system, they were required to compensate the registered land users and obtain a consent letter to abandon their rights, and then apply for deregistration from Xiulin Township Office (ibid, p. 108). By completing these measures, ACC effectively terminated Indigenous land claims for the mining area that ACC was leasing. The township office approved ACC’s abandonment procedures and allowed ACC to begin operations (ibid). The initial lease period expired in 1977 but was subsequently renewed for another twenty years by the government and mining operations continued.

### **Establishment of the Anti-Asia Cement Return My Land Movement**

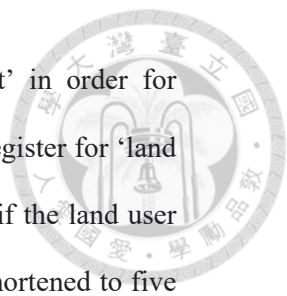
In 1995 just one year before ACC’s twenty year lease extension expired, a woman named Tian Chun-Chou (田春綢), a member of the Truku Qrgi Tribe, a sub-tribe of the



larger Bsgnan Tribe, returned to Taiwan after living in Japan for many years (see image 2 for map). She attended a consultation meeting hosted by ACC about the lease renewal procedures and found to her dismay that her parents' land rights had been abandoned. Tian Chun-Chou was shocked by this discovery because she expected that when the leasing of land ended, her family's land would be returned. After researching the problem and talking with other landowners about their shared concerns, she and her family founded the Anti-Asia Cement Return My Land Movement and started to fight for the return of their land and other villagers' land who also were shocked to find their land rights no longer existed (Truth Investigation Report, p. 40). Thus began a decades long movement that continues today led by Truku villagers and activists who aim to regain land rights. Despite the protests from villagers, in 1997, ACC's mining lease was renewed for another twenty years. Instead of taking this as a sign of defeat, momentum quickly grew and the movement gathered support for both Indigenous and non-Indigenous people in Taiwan and beyond (ibid).

### **First Legal Actions Against ACC**


In 1999, Taiwan's Indigenous People's Association of Taiwan (台灣省原民會), an organization founded by the government in 1996 to "plan and promote Indigenous policies and affairs" filed a lawsuit as plaintiffs to officially cancel the land use rights of the Truku people (ibid, p. 41; Pan, 2004, 14:30). The reason for this was because it was discovered that ACC's official abandonment of land rights proceedings for more than 50 of the 211 cases were incomplete. This lawsuit greatly angered many Truku people who gathered outside of the court to protest. The lawsuit took over a year and in 2000, the Hualien District Court rejected the lawsuit. This meant that the land rights of several Truku villagers had not been officially canceled, prompting several villagers to go directly to the town office to ask for the return of their land. However, the town office



refused to return the land because under the ‘Mountain Reserve Act’ in order for Indigenous people to claim rights to the land, they needed to officially register for ‘land use rights’ with the town office. Land use rights could only be granted if the land user could prove that there had been ten years of continuous farming, later shortened to five years (Truth Investigation Report, 2022, p. 33, 52). Given that registration of farming rights began in 1969 and ACC was established in 1973, followed by the erection of a wall blocking land users from entering the factory premises, registration of land use rights was nearly impossible for local Truku villagers (ibid, p. 52). However, instead of giving up, in 2001 hundreds of Truku people broke through the wall to exercise their ‘farming’ rights on factory land by planting saplings (Pan, 2004, 52:00). Protests continued in subsequent years for the return of Truku land. In 2004, several farmers filed a petition with the Xiulin Township office for the return of their land, however, it was rejected in 2011 (Truth Investigation, 2022, p. 41). This did not stop them; in 2012 these farmers filed a petition to the Indigenous People’s Association for the return of their land use rights, claiming that they had in fact farmed the land continuously for five years (ibid). The petition was approved and the land rights were granted. ACC, dissatisfied with the result, appealed the results to Taiwan’s higher court systems. In 2013, the higher courts system upheld the ruling and two Truku villagers officially regained their land rights. This victory was exciting, however, for many other villagers, proving five years of continuous land use proved to be an insurmountable task and many villagers were unable to regain land rights through this avenue.

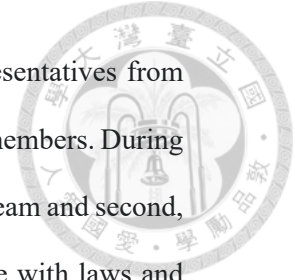
### **Increased Awareness for the ACC Case and Subsequent Legal Action**

Meanwhile, outside of this case in Taiwan, Indigenous rights were finally coming to the forefront of the national agenda. In 2005 the Indigenous Peoples Basic Law was first passed and in 2016 the current president of Taiwan, Tsai Ying-wen, officially



apologized to Taiwan's Indigenous peoples on behalf of the government for 'discrimination' and 'neglect' (Office of the President, 2016). The growing recognition of injustice towards Indigenous peoples and environmental concerns in Taiwan set the stage for several important developments in the Asia Cement case. In March, 2017, ACC's twenty-year lease was once again up for renewal and in just three months, the ministry of economic affairs approved ACC for another twenty-year lease period. This extension was approved despite the fact that the Mining Law was at the time under review by the government and changes could have affected the required protocol for a lease renewal (ibid, p. 4).

In April, 2017, Tribal leaders filed a petition to revoke mining rights under the Indigenous Peoples Basic Law. In June of the same year, famous filmmaker Chi Po-Lin and creator of "Beyond Beauty Taiwan from Above," died while filming in Hualien County (ibid). Shortly after his death, screenshots of his conversations and pictures he had captured revealing the expansion of mining in Xincheng were discovered, drawing international attention to the case and exposing ACC's mining activities. Around the same time, several NGOs and environmental organizations launched a petition to investigate the extension of mining rights which gained over 200,000 signatures (ibid). Also in June, Walis Perin, member of the "Indigenous historical justice and transitional justice committee" (總統府原住民族歷史正義與轉型正義委員會) requested the government to investigate the Indigenous land rights in the Asia Cement Case (ibid). In September, 2017, the Executive Yuan rejected the petition to revoke mining rights citing the Basic Law only applied to applications for new mines (ibid, p. 1). Dissatisfied with this result, the petitioning parties filed a lawsuit against the Ministry of Economic Affairs to revoke ACC's mining rights extension.



In March, 2018, an important meeting took place between representatives from the three concerned parties, ACC, the government, and the Truku Tribal members. During this meeting, they reached a consensus to first form a truth investigation team and second, to conduct investigations in a fair, just, and open manner in compliance with laws and regulations, Truku Gaya,<sup>5</sup> and the principles of transitional justice to discover the facts and truth of the case (ibid, p. 5). While the Truth Investigation report team researched, in 2019, the higher courts revoked ACC's mining permit extension, citing that the company had failed to get the approval from the local Indigenous population. It was subsequently appealed by ACC, but in September 2021, the appeal was rejected (Chou, 2021). To approve lease extension, ACC was legally required to get consent from the local Indigenous population, specifically, the Bsngan Truku Tribe.

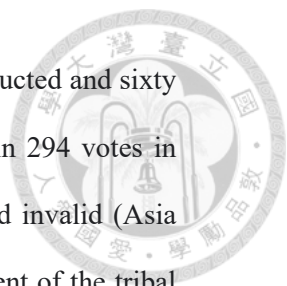
### **Consultation and Agreement Proceedings**

Consultation proceedings between the Bsngan Truku Tribe, ACC, and the government began through tripartite talks that included consultation and agreement proceedings in the form of hearings and tribal communication meetings (ibid; Asia Cement Corporation, 2022, p. 50). In these meetings tribal members expressed their concerns and needs. The Bsngan Truku Tribal Council put for a notable document on April 11, 2021 "The Tribes' 30 Demands for ACC for the 2021 Consultation Process", outlining thirty conditions that ACC needed to address in order for future negotiation and consent to mining operations (see appendix A). ACC responded to this document with the 10+11 Benefit Sharing Mechanism (see appendix B). At a Bsngan Tribal Meeting, it was decided that a vote of agreement would be conducted after the official release of the Truth Investigation Report which was published in January of 2022 (Asia Cement

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<sup>5</sup> "In terms of Truku culture, its core knowledge is understood as Gaya, which are the life regulations passed down by their ancestors to define the guidelines for interaction between peoples or even between human beings and nature" (Tansikian, 2021, p. 26)

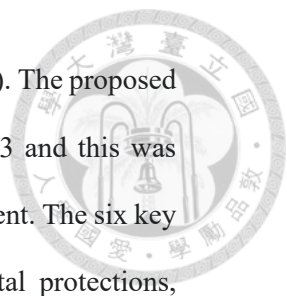




Corporation, 2022, p. 50). In February of the same year, a vote was conducted and sixty four percent of the local population participated in the vote, resulting in 294 votes in agreement, 45 votes in disagreement, and 14 votes that were considered invalid (Asia Cement Corporation, 2022, p. 50). The vote passed as eighty-three percent of the tribal households approved the continuation of mining operations at Xingcheng Mine. Consequently, ACC filed a new application for the extension of its mining rights. However, several Truku tribal members believe that the voting system developed by the Bsngan Tribal Council was unfair. Before the vote had even taken place, a lawyer at the Legal Aid Society who represented Bsngan residents dispossessed of their land, expressed concerns about the voting system. He said it was likely to be “deeply flawed, lacking clarity over when to initiate it, who can participate in voting, and whether industry must have a dialogue with the local community” (Waksman, 2021). He furthermore worried that it “uniformly imposes a rigid system on Taiwan’s diverse indigenous community, in which each tribe has a unique governing tradition” (ibid). Since the vote has taken place, several tribal members are still questioning the fairness of the voting process to gain consent. In 2022, at an Indigenous Historical Justice and Transitional Justice Committee with President Tsai, Tribal Representative Teyra Yudaw voiced the need to revise the voting mechanism in to avoid inequalities in the future (Presidential Commission on Historical Justice and Transformational Justice for Indigenous Peoples, 2022, 31:00).

### **Status of ACC’s Mining Operations Today**

At the end of 2022, the Taiwanese government officially announced that it would begin revisions to the Mining Law, a process that had been delayed for many years. The revisions aim to: “safeguard indigenous rights, public transparency, and sustainable development of national resources, and to keep pace with modern changes in the economy,



environment and technology” (Department of Information Services, 2023). The proposed revisions were finally passed by the Legislative Yuan on May 26, 2023 and this was largely viewed as a victory for both Indigenous peoples and the environment. The six key changes include to remove improper provisions, enhance environmental protections, guarantee indigenous peoples' rights, enable information transparency and public engagement, strengthen mine management and extraction limits, and compensate affected residents (ibid). These changes will undoubtedly affect ACC’s Xincheng mining operations. Some changes they will be required to make include to conduct an EIA within the next three years and develop a more detailed mine closure plan as well as add vertical limits to mining operations or else risk losing its mining rights. Furthermore, the process of Indigenous consultation will need to be updated, potentially requiring ACC to obtain additional consent from the Truku peoples and review and make changes to the current benefit and compensation structure. ACC claims to be working closely with the Bsgan Tribal Council to implement the benefits covered in the 10+11 plan. However, the local community remains divided, with some actively cooperating with ACC on these measures, while others continue to oppose ACC’s current operations.

The next few months will provide further clarity and determine the future of ACC’s mining operations under the new mining regulations. However, I believe fully comprehending the impact of this case requires more than just an awareness of the legal proceedings and events that have taken place within the past decades. While the facts are necessary to know and consider for context, the impact of this case cannot be understood without a thorough exploration of the history that led to and shaped how these events transpired, more bluntly, the history of colonization of Indigenous people in Taiwan and specifically, the Truku peoples. As stated at the beginning of this chapter, “a self-critical examination of settler colonialism as an ongoing colonial structure by the settlers [in

Taiwan] continues to be very limited” and thus, looking back at how colonialism directly caused the case of ACC to transpire the way it did is the first step (Shih, p. xiii, 2021). It is impossible to move forward without first reconciling with the past and addressing the ongoing colonial structure that continues to allow injustice towards Indigenous people in Taiwan. After this first step is completed, then it is possible to comprehend proper actions that can be taken to both address past injustice and prevent further injustice and move forward in a sustainable way for all stakeholders.

### **Conclusion**

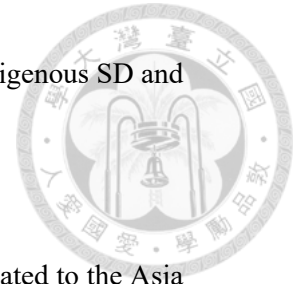
In this chapter, I have provided a comprehensive overview of the significant events related to the Asia Cement Case. Additionally, I have introduced Indigenous peoples in Taiwan and shed light on the contemporary challenges they face, including political sovereignty, recognition, and land reclamation. These details are crucial for understanding the key stakeholders and relevant information pertaining to the Asia Cement Case.

Moving forward, In the next chapter I will provide an overview of literature published about this case and outline my process to develop an Indigenous SD and EJ theoretical framework. In subsequent chapters, I will employ this framework to conduct a historical analysis, a document analysis, and provide future recommendations based on my findings.

## **2: Literature Review and Theoretical Framework**

The Asia Cement Case has gained considerable recognition in Taiwan and to some extent, internationally. Consequently, since the 2000s, researchers and media alike have extensively published on this case both in Chinese and in English. In this section, I will summarize existing literature about this case, identify the contribution of my research

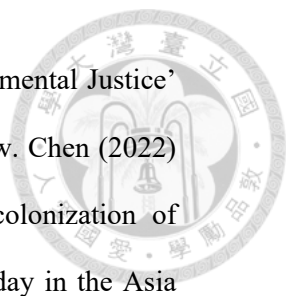
to this expanding field, and explain step by step how I developed the Indigenous SD and EJ theoretical framework that guides the remainder of this thesis.



### **Publications about the Asia Cement Case**

In the early 2000s, protests by villagers and legal proceedings related to the Asia Cement Case captured the public interest. As a result, a few important publications emerged during this time. In 2004, Pan produced an award-winning documentary, titled “我們為土地而戰” or “We Fight for the Land”. The documentary followed members of the Anti-Asia Cement Return My Land Society over several years as they organized to regain land ownership (Pan, 2004). This documentary included extensive interviews and conversations with villagers as well as members of the government and representatives from ACC. Around the same time, Chang (2000) did action research for a master’s thesis about the Asia Cement Case. Their methodology involved analyzing the history of colonization related to this case, stories from individuals both for and against mining, an interrogation of why this case is often categorized in a juxtaposition of money and land, proposing suggestions for considering collective rights in regard to this case.

Other publications look at different aspects of this case for analysis. Several authors analyzed the history of land rights and Indigenous conceptions of ownership in Taiwan related to this case (Chen 2012; Kuan 2014). Other authors focused on legal interpretations of topics related to this case including Asia Cement’s land acquisition, Indigenous land rights, the Basic Law, and the Mining Law (Chen 2010; Huang 2018; Hsieh 2018; Tsai 2019; Chuang 2020). Kuan (2018) published a comparative study between Māori Mineral Rights in New Zealand and Taiwanese Indigenous land rights. Other authors analyzed the Asia Cement Case from an environmental impact standpoint (Fu 2013; Chen et al. 2019). Chang (2018) used Stephen Toulmin's Argument Pattern to analyze the Anti-Asia Cement Movement through analysis of social media and online

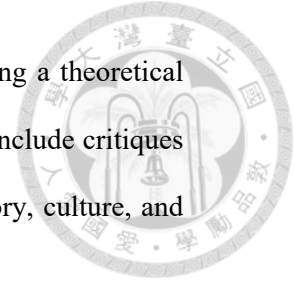


publications, arguing that activists used rhetorical strategies of ‘Environmental Justice’ (EJ) and ‘Oppressed Others’ to advocate for a reform of the Mining Law. Chen (2022) analyzed how capitalist accumulation, resource extraction, and the colonization of Indigenous lands were instrumental to modern capitalism in Taiwan today in the Asia Cement Case.

Wang (2016) published a paper that addresses similar themes to this thesis. Using Aldo Leopold’s theory of ‘Land Ethic’, he analyzed the Anti-Asia Cement Movement and determined a path towards SD can be achieved in four key steps: (1) Establish an Incentive Policy for friendly, green buildings, (2) amend to the mining act, (3) include ecological humanists and local representatives in EIA committee, (4) pursue EJ through reasonable compensation for tribes, gradual land return, and co-management (as described in article 22 of the Basic Law).

While each of these authors offers some valuable insight into this case, I believe that there are several research gaps that I will attempt to address in this thesis. Firstly, despite the vast number of publications about the Asia Cement Case, I have observed that authors have not primarily utilized theory constructed or developed by Indigenous scholars for analysis. Given that this case occurs within an Indigenous community and is deeply intertwined with Truku history and knowledge, I believe it is crucial to employ an analytical framework capable of incorporating Indigenous history, culture, knowledge, and other pertinent factors.

Secondly, while some authors have examined sustainable development (SD) and environmental justice (EJ) in relation to this case, they have not specifically dedicated a section of their theses to critiquing these frameworks (Chang, 2018; and Wang, 2016). I have come across numerous sources where researchers, particularly Indigenous scholars, critique these frameworks for their failure to address the needs and perspectives of

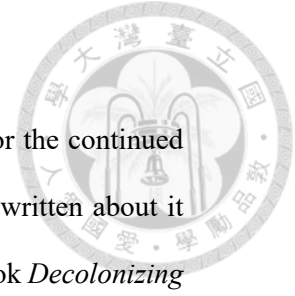


Indigenous communities. I will attempt to fill these gaps by constructing a theoretical analysis using Indigenous theory and knowledge. This framework will include critiques and alternatives to SD and EJ that I will use to incorporate Truku history, culture, and knowledge into my analysis of the Asia Cement Case.

### **Positionality and Contributions**

At its core, the Asia Cement Case is deeply rooted and caused by settler colonialism. I recognize that my position as a non-Indigenous researcher from the US makes it impossible for me to fully grasp and understand the trauma and complexities as well as the far-reaching impacts settler colonialism has on Indigenous communities in Taiwan. Yet I believe that in order to research this case, settler colonialism needs to be thoroughly understood and centered in any research methodology. Thus, first and foremost, I believe it is essential to situate this study in the voice and perspective of Indigenous scholars who have experienced settler colonialism and have developed knowledge and theories to understand and reconcile with these traumas and prevent future injustices. Indigenous knowledge systems and worldviews differ vastly from many of the frameworks that are used in mainstream academia. The continued exclusion of Indigenous voices and ways of knowing, further perpetuates the colonization of knowledge or at the very least, misconstrues or misinterprets case studies involving Indigenous communities. The majority of the aforementioned studies do not situate their research in Indigenous theory; therefore, I have developed a theoretical framework using Indigenous knowledge which I will elaborate on below to answer my primary research question:

*“Is Indigenous SD achieved in the Asia Cement Case for the Bsngan Truku People and ACC?”*



## Theoretical Framework

It is a well-known fact that ‘research’ has been used as a tool for the continued colonization of Indigenous people and many Indigenous scholars have written about it extensively (Coulthard 2014; Smith 1999; Simpson 2017, etc.). In her book *Decolonizing Methodologies, Research and Indigenous Peoples*, New Zealand scholar Linda Tuhiwai Smith (Māori, Ngāti Awa, and Ngāti Porou iwi), (1999) writes:

“From the vantage point of the colonized, a position from which I write, and choose to privilege, the term 'research' is inextricably linked to European imperialism and colonialism. The word itself, 'research', is probably one of the dirtiest words in the indigenous world's vocabulary. When mentioned in many indigenous contexts, it stirs up silence, it conjures up bad memories, it raises a smile that is knowing and distrustful” (p. 1).

Furthermore, the legitimization of certain ‘knowledge’ that can be used for ‘research’ is also colonized, something that Canadian scholar Leanne Simpson, Michi Saagiig member of the Alderville First Nation, (2017) writes about, “...the knowledge our bodies and our practices generate, that our theories and methodologies produce, has never been considered valid knowledge within the academy and therefore often exists on the margins” (p. 31). She goes on to explain why Indigenous knowledge is crucial to understand colonization:

“As a result of this gatekeeping, the academy cannot account for nor explain what has happened to me as a kwe under the system of colonialism in a manner that I can wholeheartedly embrace, and without the knowledge, analysis, and critique produced by Indigenous people, particularly women and 2SQ people on our own terms, the academy cannot have a full understanding of colonialism as a process...” (ibid).

Therefore, I believe that in order to account for and explain the Asia Cement case, it is necessary to use “knowledge, analysis, and critique produced by Indigenous people” as this case is deeply rooted in colonization (ibid).

The aim of my theoretical framework is to develop a comprehensive understanding of the essential components of Indigenous SD and EJ. To achieve this, I

trace back to the very roots of this case: land injustice. I commence by examining the concept of land dispossession and colonialism as forms of environmental injustice. Subsequently, I explore global approaches to addressing environmental injustice, which leads me to SD and EJ frameworks. Through an exploration of research conducted by Indigenous theorists on SD and EJ, I identify several critiques of these frameworks and alternative pathways. Specifically, these pathways are ‘Indigenous EJ’ as defined by Gilio-Whitaker (2019) and Parsons et al. (2021) and Dockry et al.'s (2015) definition of Indigenous SD. These pathways provide ways to break the cycle of perpetuating environmental injustice, and arrive at versions of SD and EJ that prioritize and center Indigenous needs and conceptions of futurity. I’ve created a flowchart to help conceptualize my process (see figure 1).

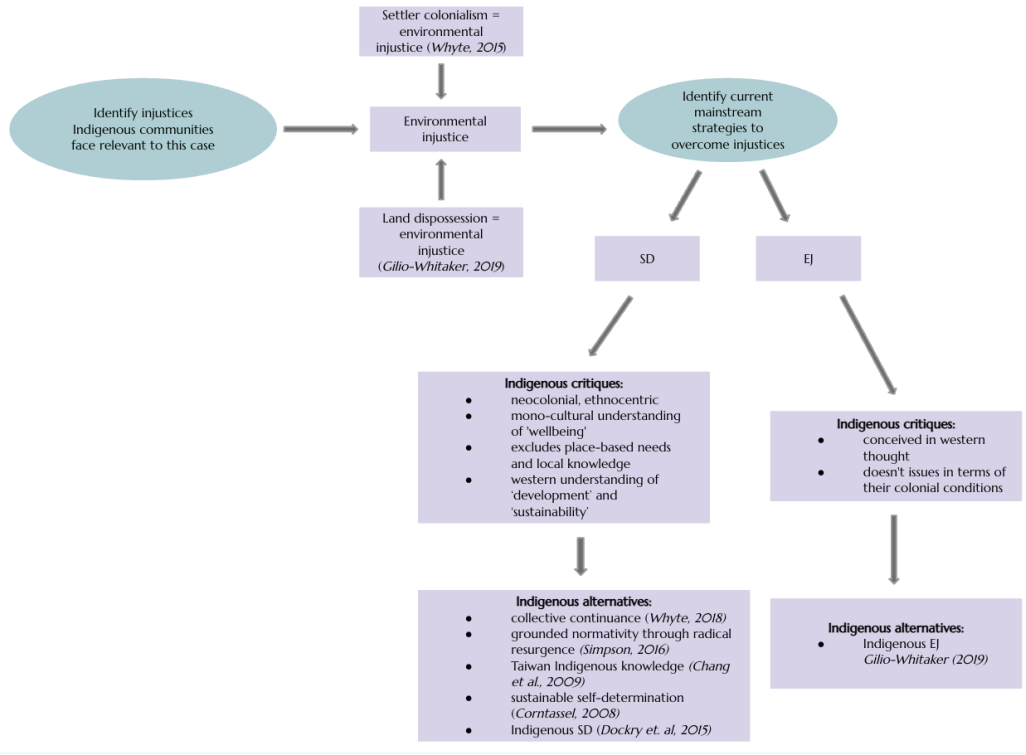


Figure 1: a flowchart of my theoretical framework

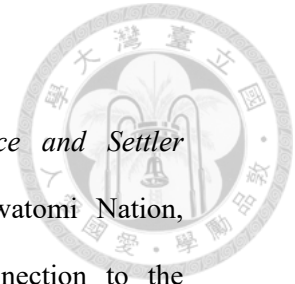


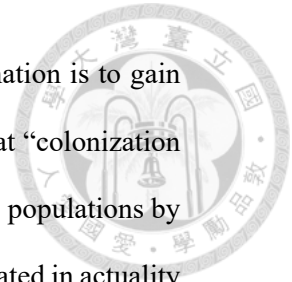
## **Settler Colonial Structure as an Environmental Injustice**

In his article *Indigenous Experience, Environmental Justice and Settler Colonialism* (2016), US scholar Kyle Powys-Whyte, citizen Potawatomi Nation, discusses the relationship between Indigenous well-being and connection to the environment and explains how this connection has repeatedly been disrupted by settler colonial activities. He writes, “settler colonialism can be interpreted as a form of environmental injustice that wrongfully interferes with and erases the socioecological contexts required for indigenous populations to experience the world as a place infused with responsibilities to humans, nonhumans and ecosystems” (Whyte, 2016, p. 3). One example he uses is tourists interfering with Anangu Tjukurpa law in Uluru-Kata Tjuta National Park in Australia, the traditional homeland of the Anangu people, who co-manage this area with the government. In this case, Tjukurpa law “establishes an indigenous terrain of power that both names the rock-place as Uluru and identifies socially infused biophysical processes, allowing them to read Dreaming tracks of their peoples on the rock face” (as cited in Whyte, 2016, p. 4). Despite clear signs in many languages stating that trespassing breaks Tjukurpa law, tourists continually deface the rocks, erasing and interfering with Anangu people's ability to experience their world. Furthermore, the government sends support and rescue teams to the area, if necessary, in essence verifying that use of this area is acceptable. Through this case Whyte clearly describes the socioecological contexts needed for Anangu wellbeing, and how tourists and the government interfering and erasing these contexts is an environmental injustice.

## **Land Dispossession as an Environmental Injustice**

Another way to understand settler colonialism as an environmental injustice is by going to the root of settler colonialism: gaining access and control over *land*. In her book, “As Long as Grass Grows,” US scholar Gilio-Whitaker (2019), member of the Colville Confederated Tribes, takes readers through the history of colonization in the US, arguing





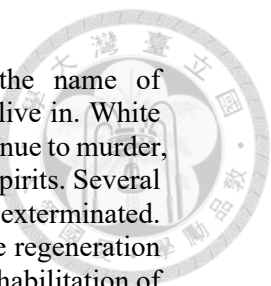
that “In settler colonialism... the purpose of political control and domination is to gain access to territory” (p. 24). Through countless case studies she shows that “colonization was not just a process of invasion and eventual domination of Indigenous populations by European settlers but also that the eliminatory impulse and structure it created in actuality began as environmental injustice” (Gilio-Whitaker, 2019, p. 12). She further writes, “the origin of environmental injustice for Indigenous peoples is dispossession of land in all forms; injustice is continually reproduced in what is inherently a culturally genocidal structure that systematically erases Indigenous peoples’ relationships and responsibilities with their ancestral places” (ibid, p. 36).

Whyte (2016) and Gilio-Whitaker (2019) explain how settler colonialism is a structure with a purpose to extract not just land but also resources, culture, knowledge. Furthermore, settler colonial activities directly interfere with and erase the contexts required for Indigenous peoples to experience the world through their own knowledge systems and worldviews. Thus, settler colonialism and resulting land dispossession is an environmental injustice. However, recognizing settler colonialism as an environmental injustice is only the first step. Taking the next step towards rectifying this injustice involves exploring mainstream frameworks designed to address environmental injustice; EJ and SD. In the next section, I will explore Indigenous perspectives of frameworks, with a focus on Indigenous authors critiquing SD and for failing to meet the needs of Indigenous communities (LaDuke (1992), Whyte (2016), McGregor (2018), McGregor et al. (2020), Parsons et al. (2021)).

### **EJ Critiques**

The word ‘justice’ has taken on many different meanings and depending on the context it is used in, can be somewhat problematic. Simpson (2016), explains why:

“Justice is a concept within Western thought that is intrinsically linked to settler colonialism. Indigenous thought systems conceptualize justice differently. We

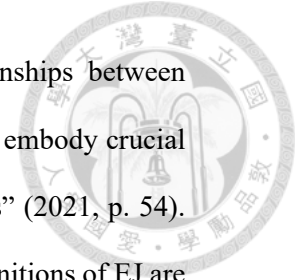


have experienced four centuries of apocalyptic violence in the name of dispossession in the part of the Nishnaabeg nation I am from and live in. White supremacy, capitalism, and heteropatriarchy have targeted and continue to murder, disappear, attack, criminalize, and devalue our bodies, minds, and spirits. Several of the plant and animal nations we share territory with have been exterminated. “Justice” to me, in the face of all that, means the return of land, the regeneration of Indigenous political, educational, and knowledge systems, the rehabilitation of the natural world, and the destruction of white supremacy, capitalism, and heteropatriarchy. “Justice” within the confines of settler colonialism gets paralytically overwhelmed” (Simpson, 2016, p. 21)

Simpson’s problem with justice as conceived in western thought and very much so linked to the very systems that oppress Indigenous peoples is similar to the problem Parsons et al. (2021), three researchers from New Zealand, address. They argue, “The EJ framework, at present, does not sufficiently take into account the influence of settler colonialism on Indigenous peoples and recognise that settler-colonial rule exacerbates and/or causes environmental injustices for Indigenous peoples” (p. 62). Gilio-Whitaker (2019) proposes what is needed for EJ to exist, writing, “[EJ] must be capable of a political scale beyond the homogenizing, assimilationist, capitalist State” (p. 25). Like Simpson, Gilio-Whitaker believes that working within the systems of the State (that exists as a settler colony) to achieve EJ is not possible.

### **Indigenous EJ**

Both Parsons et al. (2021) and Gilio-Whitaker (2019) arrive at a similar conclusion: in order for EJ frameworks to work for Indigenous communities, EJ needs to be reformed into *Indigenous* EJ. Gilio-Whitaker explains the conditions needed: “[EJ] must conform to a model that can frame issues in terms of their colonial condition and can affirm decolonization as a potential framework within which environmental justice can be made available to [Indigenous peoples]” (ibid). She calls for “a differentiated environmental justice framework – we could call this an ‘Indigenized EJ – [that] must acknowledge the political existence of Native nations and be capable of explicitly respecting the principle of Indigenous nationhood and self-determination” (ibid, p. 12).



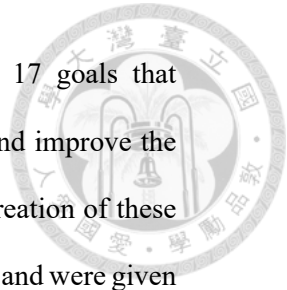
Parsons et al. write, “[Indigenous EJ] ... makes explicit the relationships between indigenous worldviews, cultural continuance, and sovereignty which all embody crucial components of power, authority, and justice within Indigenous contexts” (2021, p. 54). What is clear from both of these authors is that mainstream uses and definitions of EJ are not working because they often do not acknowledge colonialism, incorporate decolonial thought, and incorporate Indigenous contexts necessary for Indigenous self-determination and cultural continuance. These scholars propose Indigenous EJ as an alternative to the current approach that fails Indigenous communities.

### **SD Critiques**

While Indigenous scholars have identified several inadequacies of EJ, similar shortcomings can be found in SD. Prominent critiques shared by Indigenous scholars include the need to address neocolonialism and ethnocentric assumptions within sustainability, recognize diverse notions of well-being, consider place-based needs and knowledge, and challenge Western conceptions of development.

A commonly used definition of SD originated from the 1987 Brundtland report ‘Our Common Future’: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Report, 1987, p. 41). While this definition may seem harmless, US scholar Jeff Corntassel (2008), member of the Cherokee Nation, explains why this definition becomes a problem when applied in theory or practice in his paper, *Toward Sustainable Self-Determination: Rethinking the Contemporary Indigenous-Rights Discourse*. He writes “this definition does not go far enough as a benchmark for indigenous political, cultural, economic, and environmental restorative justice (in theory and in practice)” (Corntassel, 2008, p. 118).

Perhaps the most recent example of translating the concept of SD into practice is the 2015 United Nations Sustainable Development Goals (UNSDGs or SDGs) for 2030.

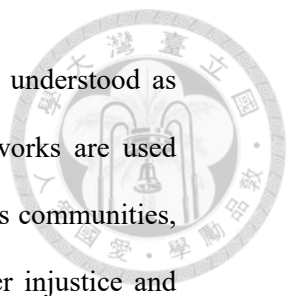


Based loosely from Brundtland report's definition, the UNSDGs are 17 goals that constitute "a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere" (United Nations). In the creation of these goals, Indigenous people were represented as one of the nine major groups and were given a platform to speak. Yet while there was an effort to include Indigenous voices in the creation of SDGs, for some Indigenous peoples these goals not only fall short and fail to address the needs of communities but furthermore actually hinder and harm their ability to meet their own sustainability needs. Indigenous peoples have identified four specific failures of the UNSDGs and other practical applications of SD. These failures include neocolonial and ethnocentric views of SD, the exclusion of Indigenous perceptions of well-being, neglecting Indigenous place-based needs and local knowledge, narrowly defining SD in western terms.

#### *Neocolonial and Ethnocentric Views of Sustainability*

In the 2001 report titled, *Our Responsibility to the Seventh Generation: Indigenous Peoples and Sustainable Development* the authors write, "The most difficult barrier for any of us to cross is our ethnocentric view of the world" (Clarkson et al., p. 9). This quote is used to address the failure of non-Indigenous people to legitimize and accept Indigenous ways of knowing and in doing so, denying and minimizing Indigenous knowledge. Dockry et al. (2015) have identified important concepts directly related to Indigenous views of sustainability, such as, "reciprocity (mutual responsibilities guiding human and non-human interactions), interrelationships among humans and non-humans (all things are related), cooperation, and respect" (pg. 2). These concepts are Indigenous ways of knowing that SDGs and SD applications fail to legitimize or accept.

Other Indigenous communities feel that the SDGs are neocolonial. In one study, "SDGs were accused as being fundamentally framed by Western modernity, capitalism,



and anthropocentrism, which for Indigenous societies... cannot but be understood as neocolonial” (Waldmüller et al. 2022, p. 4). When SDGs and frameworks are used without integrating Indigenous understandings, particularly in Indigenous communities, it perpetuates an ethnocentric and neocolonial approach and can further injustice and colonialism within those communities.

#### *Mono-Cultural Understand of Well-Being*

The way human well-being is defined by the UN is direct example of how an ethnocentric perspective of sustainability can exclude Indigenous values. On their website for SD and UNSDGs, The UN states that, “for sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social inclusion and environmental protection. These elements are interconnected and all are crucial for the well-being of individuals and societies” (United Nations). However, many Indigenous scholars argue that their understandings of well-being go far beyond a narrow definition of economic growth, social inclusion, and environmental protection (Kealiikanakaoleohaililani et al. 2015; Yap and Watene 2019; Dockry et al. 2015; Navarrete et al. 2021). A good way to understand this is through a quote from Navarrete et al. (2021) *Rethinking sustainable development by following Indigenous approaches to community wellbeing*; “Indigenous notions of community wellbeing encompass social, cultural, spiritual, environmental, and economic intersections that are deeply rooted in distinct and locally based traditional knowledges” (p. 15). Overall, the mono-cultural understanding of well-being perpetuated by the UN's definition of sustainable development reflects an ethnocentric perspective that disregards Indigenous values and conceptions of SD and well-being.



### *Exclusion of Place-Based Needs and Local Knowledge*

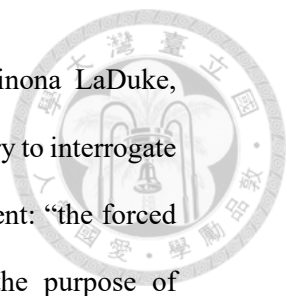
Several authors have critiqued SD for being too universal and failing to address the place-based needs of local communities to achieve sustainability (Kealiikanakaoleohaililani et al. 2015, Virtanen et al. 2020, Whyte et al. 2020, Yap and Watene 2019, Navarrete et al. 2021). Kealiikanakaoleohaililani et al. explain,

“Indigenous sustainability science seeks local knowledge particularly relevant to a place, often scaled down and attained through long-term and local relationships that lead to the accumulation of observations and experience. This contrasts Western sustainability science, which seeks general knowledge applicable across systems, with data being aggregated upwards and gained through broadly established methods and protocols” (p. 62).

The “broadly established methods and protocols” inherent to SDGs are most easily implemented through a top-down approach, with power and authority being granted to governments to oversee and delegate tasks (ibid). This is something Indigenous communities in particular might find reason to distrust, given the government’s role is historical and continued colonization of Indigenous communities. Therefore, in order to be effective Navarrete et al. (2021) argue “strategies for sustainable development must always include and normalize, local understandings and the Indigenous Knowledges supporting them while at the same time contextualize and continually question and surface Western interpretations of development and sustainability” (p. 4). This example clearly illustrates the contrast between SDGs, which adopt a top-down approach, and Indigenous notions of SD, which emphasize a bottom-up approach, centered in place-based knowledge and local application.

### *Defining ‘Development’ Narrowly in Western Terms*

A common theme that Indigenous scholars in previous three sections all addressed either directly or indirectly is the problems associated with using western definitions or understandings of ‘sustainable’ and ‘development’. Navarrete et al. (2021) explain why this is a problem bluntly: “sustainable development is a flawed term grounded in Western



thought and born in the context of extractivist practices” (p. 12). Winona LaDuke, member of the Mississippi Band Anishinaabeg, explains why it is necessary to interrogate mainstream definitions and assumptions of ‘sustainable’ and ‘development: “the forced underdevelopment of sustainable indigenous economic systems for the purpose of colonial exploitation of land and resources-are an essential backdrop for any discussion of existing environmental circumstances in the North American community and of any discussion of sustainable development in a North American context” (p. 131). Both LaDuke and Navarrete et al. address how ‘development’ in western thought has historically been driven through extractivism. Thus, applications of SD and SDGs can represent past and present trauma associated with colonialism, exploitation, and extractivism for Indigenous peoples.

Simpson (2011) also interrogates the term ‘SD’ in her book *Dancing on our Turtles Back* by sharing a conversation she had while teaching with Nishnaabeg Elder Robin Green-ba, a scientist at the Centre for Indigenous Environmental Resources in Winnipeg.

“Our class was discussing what is meant by the term "sustainable development" ... I asked Robin if there was a similar concept in Nishnaabeg thought. He thought for a moment and then answered, "No there isn't." He told the class that sustainable development thinking is backwards, that we should be doing the opposite. He explained that what makes sense from a Nishnaabeg perspective is that humans should be taking as little as possible, giving up as much as possible to promote sustainability and promote mino bi-maadiziwin ["living the good life" or "the art of living the good life"] in the coming generations.” (p. 141).

In this quote the idea of ‘development’ is interrogated and associated with taking more than is necessary for survival at the potential expense of future life. This leads to an important question that Navarrete et al. (2021) address in their paper, “how can we discuss “sustainable development” without the linear notion of what the word “development” implies” (as cited in Navarrete, 2021 p. 6). This linear concept contradicts many



Indigenous knowledge systems that perceive time and existence as “non- hierarchical and non-linear; rather it takes the form of a cycle, of the continuity of being, becoming another cycle, nurntikki [to go on forever]” (as cited in Parsons et al, 2021, p. 60).



*Defining ‘Sustainable’ Narrowly in Western Terms*

Furthermore, it is crucial to recognize that ideas that today are associated or characterized as ‘sustainability’ are not new, in fact, they exist in Indigenous societies and Indigenous knowledge systems for millennia. Deborah McGregor, a Canadian Anishinaabe scholar from Whitefish River First Nation, argues that what scholars and scientists call ‘sustainability’ is just Indigenous Knowledge. She believes, “Eurocentric thinkers, academics, policy makers, scientists, and resource managers did not invent this knowledge and have only recently recognized it” (McGregor, 2004, pg. 389). Sustainability, an integral piece of Indigenous Knowledge, has rebranded for western use in a way that removes its original meaning and excludes Indigenous peoples who conceived of this concept in the first place.

In this section, I have summarized some of the main Indigenous critiques of SD written by Indigenous authors. From these critiques, it is evident that Indigenous scholars argue for a more inclusive and culturally sensitive approach to sustainable development, or an entirely different approach altogether. Indigenous critiques highlight the historical and ongoing impacts of colonization on Indigenous communities and their relationship with sustainable development. They emphasize the need for self-determination, the protection of Indigenous rights, and the empowerment of Indigenous communities to determine their own paths towards sustainability.

Indigenous scholars call for a shift away from the dominant Western perspectives and a move towards embracing Indigenous concepts of sustainability. These concepts emphasize reciprocity, interconnectedness, cooperation, respect, and a holistic

understanding of well-being that encompasses social, cultural, spiritual, environmental, and economic dimensions. In the next section, I will explore Indigenous alternatives to mainstream understandings of SD.

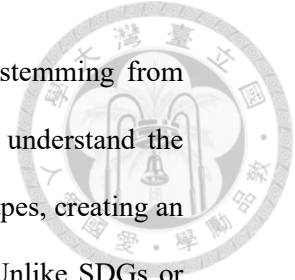


### **Indigenous Futurity: Alternatives to SD**

Instead of looking towards the future through mainstream SD frameworks, several Indigenous theorists have proposed alternative pathways that center the needs of their communities. In this section I propose five alternatives: collective continuance, radical resurgence through grounded normativity, sustainable self-determination, Taiwan's Indigenous knowledge and Indigenous SD (Whyte, 2018; Simpson, 2016; Corntassel, 2008; Tansikian, 2021; Dockry et al., 2015). These alternative pathways for Indigenous futurity share common ground in their recognition of the interconnectedness and relationships between human lives, ecosystems, and landscapes. Additionally, each pathway was developed within the context of a contested landscape in direct response and protest to settler colonialism, asserting Indigenous perseverance and futurity. Furthermore, they all emphasize the importance of the prioritizing culture and identity, Indigenous self-determination and the pursuit of community well-being, and place-based processes rooted in Indigenous knowledge. One final theoretical concept I include in this section is Indigenous political ecology. Although this paper is not written by an Indigenous scholar, I believe it ties together the five alternatives to SD well and thus, I have included it to help frame the remainder of my theoretical framework.

#### *Collective Continuance*

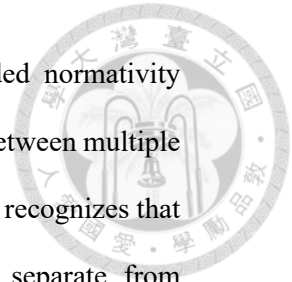
A term developed by Whyte (2018) is *collective continuance* or “a society's overall adaptive capacity to maintain its members' cultural integrity, health, economic vitality, and political order into the future and avoid having its members experience preventable harms” (p. 355). In the context of Indigenous nations, he defines ‘continuance’



as “survival and flourishing in the face of change, including change stemming from oppression” (Whyte, 2018, p. 153). This term can further be used to understand the interconnectedness between human institutions, ecosystems, and landscapes, creating an ecology that facilitates adaptation to changes (Whyte, 2018, p. 133). Unlike SDGs or mainstream SD frameworks, collective continuance as a theoretical concept can comprehend the multi-faceted and interdependent relationships that Indigenous worldviews contain and furthermore, is a more accurate way to perceive whether or not a community is ‘flourishing’. Whyte also explains that this theoretical framework can be applied to non-Indigenous collectives as well, using the US as an example. This theory therefore presents a more inclusive framework to assess whether the relationships and responsibilities used by both Indigenous and non-Indigenous collectives are sustainable or unsustainable and help or hinder their future survival.

#### *Radical Resurgence through Grounded Normativity*

‘Grounded normativity’ is a term conceptualized by Canadian Dene scholar Glen Sean Coulthard which closely resembles the “qualities of relationship and responsibilities” that constitute collective continuance. It can be understood as “the systems of ethics that are continuously generated by a relationship with a particular place, with land, through the Indigenous processes and knowledges that make up Indigenous life” (as cited in Simpson, 2016, p. 22). For Simpson, grounded normativity serves as the necessary knowledge and tools to implement radical resurgence, which she defines as “a set of practices through which the regeneration and reestablishment of Indigenous nations could be achieved” (ibid, p. 16). Crucially, she argues that “...the fuel for our radical resurgence must come from within our own nation-based grounded normativities because these are the intelligence systems that hold the potential, the theory as practice, for making ethical, sustainable Indigenous worlds” (ibid, p. 25).



Collective continuance and radical resurgence through grounded normativity share similar themes for place-based relationships and interdependence between multiple elements, values prevalent in Indigenous worldviews. Crucially Simpson recognizes that these theoretical frameworks must be understood and implemented separate from institutional. Jeff Corntassel, a member of the Tsalagi Cherokee Nation, has also written extensively about resurgence, particularly in his edited volume titled, “Everyday Acts of Resurgence.” This collection of essays by different scholars echoes many of the ideas shared by Simpson but with an emphasis on daily actions taken by Indigenous communities to engage with land cultures, and communities, describing how these “seemingly small actions are significant in informing both the micro and macro processes of community resurgence” (Corntassel, 2018, p. 18).

#### *Sustainable Self-Determination*

Jeff Corntassel also introduces a theory called "sustainable self-determination" as an alternative to SD. According to Corntassel, sustainability for Indigenous peoples is intrinsically linked to the transmission of traditional knowledge and cultural practices to future generations (Corntassel, 2008, p. 118). Corntassel emphasizes the importance of focusing on responsibility-based processes and sparking a spiritual revolution rather than relying on state-based solutions. He argues, "It entails sparking a spiritual revolution rather than seeking state-based solutions that are disconnected from indigenous community relationships and the natural world" (ibid, p. 124).

Corntassel's perspective on sustainability and relationships clarifies his definition of sustainable self-determination. He defines it as “a new global benchmark for the praxis of indigenous livelihoods, food security, community governance, and relationships to the natural world and ceremonial life that enables the transmission of these cultural practices to future generations” (ibid). Corntassel proposes sustainable self-determination as a

framework to restore sustainable relationships on Indigenous homelands. It offers a global framework that prioritizes Indigenous well-being and challenges state-based solutions such as SDGs.



### *Taiwan's Indigenous Knowledge*

Tansikian (2021), a member of Taiwan's Bunan group, wrote a paper exploring Indigenous knowledge in Taiwan using a model developed by Chang et al. (2009) (refer to figure 2) (p. 10). This knowledge system “includes the philosophical basis of the worldview formed over a long period of time by the indigenous people, as well as the practical knowledge for survival in this world (including the social and the natural worlds)” (as cited in Tansikian, 2021, p. 11). Furthermore, Taiwan’s Indigenous knowledge model “retains its own autonomy as its core, continuously adjusting itself under the influence of history, as well as internal and external shocks, inheriting and renewing itself at the same time to face survival challenges” (as cited in Tansikian, 2021, p. 11). Thus, the Chang et al. (2009) model of Taiwan’s Indigenous knowledge is autonomous, dynamic, able to incorporate Indigenous history, and be used for the survival and development of Indigenous peoples in Taiwan. For Tansikian (2021), “the building of an indigenous knowledge system and the organizing of its specific content will be the basic project for the fulfillment of indigenous rights” (ibid, p. 28).

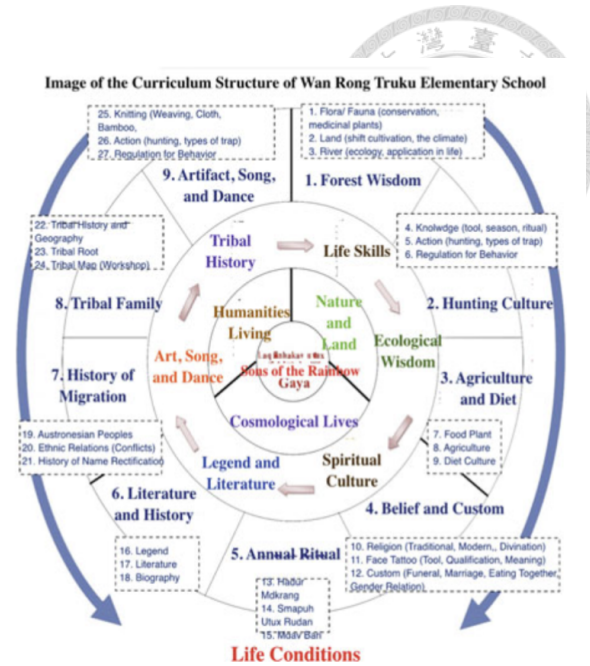


Figure 2: Taiwan's Indigenous Knowledge (Source: Tansikian, 2021, p. 12; p. 25)

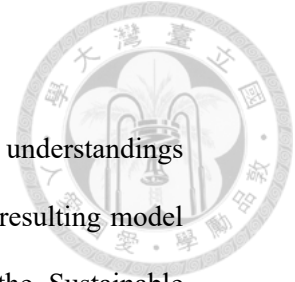
**core categorical knowledge (CCK):** “indigenous peoples’ interpretations of the relationships between the spiritual world, the natural world, and the human world” (ibid, p. 12)

**modern knowledge (MK):** “the knowledge system of the modern society that the indigenous peoples face in reality” (ibid)

**sub-category knowledge (SCK):** “knowledge formulated by indigenous peoples based on the scope of core knowledge, as indigenous peoples seek to continue their own knowledge tradition while interacting with modern knowledge in order to adapt to current and actual survival conditions... Suggested for the categories... are respectively tribal/indigenous history, languages, tribal/indigenous governing system/autonomy, cultural manifestations, inheritance/education, livelihood, skills/craftsmanship, medical care, traditional fields/natural resources, legal rights, media, and ethnic relations” (ibid)

Tansikian, (2021) applied this model to understand Indigenous knowledge in elementary education at Wan Rong Truku Elementary School (ibid, p. 25) (see figure 2).

I’ve included this figure because the model of Taiwan’s Indigenous knowledge is not only a great example of an alternative to SD, but Tansikian’s use of this model is a very good presentation of the core aspects of Truku Indigenous culture and knowledge that are relevant to this case. This model provides a helpful reference in later chapters when Truku history and culture are discussed.



### *Indigenous SD*

While Indigenous SD may sound like it is based on mainstream understandings of SD, in fact, there are many important distinctions. The concept and resulting model were developed by the Menominee Indian Tribe of Wisconsin at the Sustainable Development Institute (SDI) within the College of Menominee Nation, an Indigenous, tribally chartered, land-grant college located in Keshena, Wisconsin, US (figure 3). Indigenous SD is based on “[The Menominee Nation’s] profound sense of place and relationship with the land that has allowed their community to recognize and balance the tensions” of the elements they identify as part of SD (Dockry et al., 2015, 127).

The origins of Menominee Indigenous SD began thousands of years ago. The Menominee Nation have managed natural resources, particularly timber, in the area of Northeast Wisconsin sustainably for millennia. Their efforts have emerged as a guide for the future of sustainable forest harvesting in the US and according to Dockry et al (2015), some of the first federal laws mandating sustainable forest were enacted on the Menominee Indian Reservation (ibid, p. 128). In 1994, SDI developed a mission statement to, “continuously expand knowledge, understanding and resources related to Menominee Nation Sustainable Development for the purpose of ensuring ongoing protection, control and productivity of the Menominee culture, environment, economy, technology, and community” (ibid, p. 129). Over a multi-year collaborative process, a SD Advisory Council organized meetings with Menominee Tribal leaders, academics, and community members to integrate multiple perspectives into the creation of what today is the SDI model (figure 3). In this model, Indigenous SD is defined as “the process of maintaining the balance and reconciling the inherent tensions among six dimensions of sustainability: land and sovereignty; natural environment (including human beings);

institutions; technology; economy; and human perception, activity, and behavior” (p. 1).

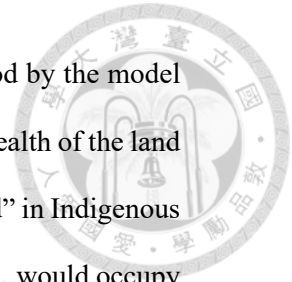
Figure 3 is a comprehensive model to visualize and explain these various elements.



Figure 3: Dockry et al.'s SDI Model: “Six dimensions of sustainable development in the College of Menominee Nation Sustainable Development Institute’s Model” (Dockry et al. 2015, p. 4)

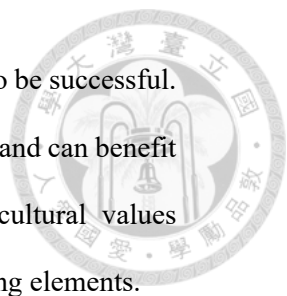
Each element is defined in the paper as such: *Land and Sovereignty* “has specific legal and cultural meanings” related to “sovereign control over their territories” (ibid, p. 129). *Natural Environment* “is broadly interpreted to go beyond natural resources to include examples such as people, human communities, plants, animals, rocks, water, and air” (ibid, p. 130). *Institutions* are “structures that develop and enforce rules of behavior and social interactions”, such as tribal governments and schools (ibid, p. 130). *Technology* is “community access to modern advances” such as telecommunications, bus also, “the use of cultural tools and practices” (ibid). *Economics* “incorporates multiple scales ranging from the individual household, to the tribe, to the region, to the nation, to the globe” (ibid). And finally, *human perception, activity, and behavior* “include different scales ranging from individual perceptions, activities, and behaviors to community understandings, values, and collective pursuits” (ibid).





An important distinction the paper makes that is not easily understood by the model alone is the role of *autochthony* or the “cultural value and belief that the health of the land and people are one—a profound connection and relationship with the land” in Indigenous SD (ibid, p. 132). In this model, Dockry et al. explain that “autochthony... would occupy the center of the model and represent the Menominee cultural value that has allowed them to balance the tensions among the six model dimensions” (ibid, p. 130). The paper discusses how autochthony is heavily debated in anthropology because it literally means, ‘coming from the soil’ which can (and has) been interpreted by scholars to imply local or from one area, or to have a territorial claim. Dockry et al. argue that autochthony defined as being from one area can marginalize groups by assuming that their knowledge does not extend beyond their geographical limits. However, autochthony defined as a territorial claim can be exclusive to groups that have occupied a space for less time and has also can lead to violent struggles for claims to land. Thus, Dockry et al. argue that the Menominee definition has evolved outside of academic debates. For the Menominee, “autochthony is ... the belief that the Menominee people originated from the land near where they currently reside. The term also describes the Menominee people’s profound *sense of place* and their intimate relationship with place” (ibid, p. 132).

The authors of this paper believe their model can be applied not only to meet the needs of Indigenous communities but also to incorporate more inclusive understanding of SD in non-indigenous contexts: “Communities, planners, development workers, academics, and anyone striving to understand sustainability can use the SDI model to develop dynamic semi-qualitative narratives that can define current environmental problems, craft solutions, and develop visions for the future” (ibid, p. 1-2). In fact, the paper outlines two ways the model has been used in the past: in higher education and in participatory community planning and research in Indigenous and non-Indigenous



communities in Bolivia. In both of these applications, the model proved to be successful. Therefore, this model can be useful beyond Indigenous nations in the US and can benefit both Indigenous and non-Indigenous communities alike if different cultural values centered around *sense of place* are identified to balance the tensions among elements.

Models like this one can be incredibly helpful tools to categorize findings in a systematic way. However, as Dockry et al. point out in their paper, the use of “models influence how researchers perceive and understand complex social and environmental systems... Because of this, researchers can develop different interpretations of the same coupled human and environment systems depending on the type of sustainability model used” (as cited in *ibid*, p. 128). Therefore, I believe it is important when applying models in research scenarios, to question if, like the SDGs tend to do, the intended model narrowly defines or constricts an analysis to one-dimensional findings. While Dockry et al.’s use of a model to push back against narrow definitions of SD in models may seem paradoxical, in fact, I believe that the multi-dimensionality of the SDI model, the origin and purpose for its creation, and the way it has already been applied reveal how this model can integrate varying place-based conditions into analysis and create some flexibility in findings.

While I have discussed many alternatives to SD and pathways towards Indigenous futurity in this section, in this thesis I will mainly be employing the ‘Indigenous SD’ for the document analysis I conduct in chapter 4. I have chosen this model and framework because I believe “The SDI model... can incorporate history, change, possible futures, complexity at multiple scales, and culture. It can guide planners, foresters, educators, and community members in constructing dynamic narrative models to understand sustainability, make decisions, design research, and plan for the future.” This model was

designed as a tool for research, amongst other things, and I intend to apply it for this very purpose.



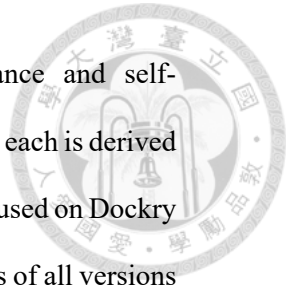
### *Indigenous Political Ecology*

The field of political ecology is relevant to this thesis as it “emphasizes the deeply political process of land and resource allocation and control” (as cited in Middleton, 2015, p. 562). This is most certainly a framework that could be used to understand the Asia Cement case, yet as Middleton points out, “political ecology focuses on political economy and related indigenous discursive positioning, with less attention to indigenous cosmologies” (ibid). Thus, she has framed political ecology in Indigenous knowledge and thought as such:

Indigenous political ecology is distinguished by: (1) attention to ‘coloniality’ or ongoing practices of colonialism (e.g. displacement of indigenous peoples from their lands; no recognition of indigenous self-determination); (2) culturally specific approaches reframing analyses in keeping with indigenous knowledge systems; (3) recognition and prioritization of indigenous self-determination, as expressed through indigenous governance; and (4) attention to decolonizing processes that explicitly dismantle systems of internalized and externalized colonial praxis. At least one or more of these elements is typically excluded from, or not considered central to, a non-indigenous political ecology (ibid).

Indigenous political ecology, as Middleton puts it, “re-centers indigenous ways of knowing the land as the foundation for discussing how climate change (among other issues) is both a political–economic–environmental problem and an epistemic–spiritual problem. Indigenous histories in place and indigenous epistemologies are necessary to frame any response to this unfolding, violent planetary change” (ibid, p. 573).

Each of these five pathways to Indigenous futurity described above: collective continuance, radical resurgence, sustainable self-determination, Taiwan’s Indigenous knowledge, and Indigenous SD, fall within Middleton’s definitions of political ecology. They emphasize the ongoing practices of colonialism, they center and prioritize research and pathways forward around Indigenous knowledge systems, they are conceptualized



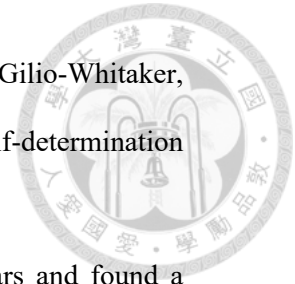
from and within Indigenous communities with Indigenous governance and self-determination, and they are all working towards decolonization. Crucially, each is derived from “site-specific indigenous frames” (ibid, p. 564). While I have just focused on Dockry et al.’s SDI as a foundation for this analysis, it shares the same conceptions of all versions of Indigenous futurity discussed in the chapter as understood through Middleton’s definition of Indigenous political ecology. Particularly, the SDI definition of autochthony as ‘sense of place’ and ‘intimate relationship with place’ as the central balance to the model resonates within each of these versions of Indigenous futurity (Dockry et al 2015, p. 132).

### **Conclusion**

I began this chapter with a literature review. I discovered many useful and relevant publications, some of which tackled similar questions such as SD and EJ in the case of Asa Cement. However, I also identified gaps in this research including researchers neglecting to use Indigenous theory and knowledge, and employing SD and EJ frameworks without investigating potential critiques from Indigenous theorists, of which I found many.

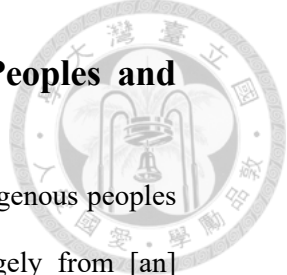
I next explained how I plan to fill those gaps through my theoretical framework of Indigenous SD and EJ. In this section, I described how I constructed this framework, beginning with the basis of the Asia Cement Case; land injustice. Through the writing of Whyte (2015) and Gilio-Whitaker (2019), I found a direct connection between settler colonialism, land dispossession, and environmental injustice. Next, I explored mainstream ‘solutions’ to environmental injustice, EJ and SD and critically examined these frameworks through the works of various Indigenous authors. Through Simpson (2016), Gilio-Whitaker (2017), and Parsons et al. (2021), I discovered that EJ frameworks are often conceived in western thought and neglect to incorporate the colonial conditions

at the root of the injustice. Indigenous EJ, proposed by Parsons et al. and Gilio-Whitaker, is an alternative that incorporates colonial conditions and focuses on self-determination for Indigenous communities.



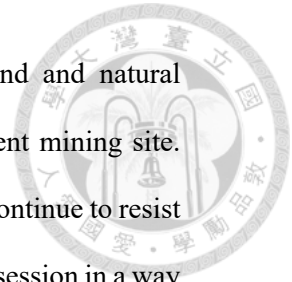
Like EJ, I also looked at SD critiques from Indigenous scholars and found a variety of concerns including neocolonialism and ethnocentric assumptions within sustainability, failure of SD to recognize diverse notions of well-being, consider place-based needs and knowledge, and challenge Western conceptions of development. I found alternatives to SD, including collective continuance, radical resurgence through grounded normativity, sustainable self-determination, and Indigenous SD. These alternatives share similarities including interdependence between human lives, ecosystems, landscapes, culture and identity, place-based processes rooted in Indigenous knowledge, and the prioritization of Indigenous self-determination community well-being. In the next section, I will analyze Truku history leading up to the Asia Cement case from a viewpoint of environmental injustice via settler colonialism and land dispossession.

### **3: Historical Overview: Colonization of the Truku Peoples and Extractivism as Environmental Injustice**



Seediq author Awi Mona (2007), “Very much alike to other indigenous peoples across the globe, aboriginal history in Taiwan has been written largely from [an] inaccurate, non-aboriginal point of view... History is a process of re-presentation of the past. Thus, it is not possible to understand indigenous peoples in their contemporary setting without first gaining some knowledge of their history as it has been formed and shaped by the indigenous experience with western colonization” (p. 90). In this chapter, I will provide an overview of the colonial history of Taiwan exclusively through the experiences of the Truku peoples and other Indigenous groups. The purpose of this historical overview is to clearly outline the settler colonial conditions and land dispossession leading up to the Asia Cement Case. Through this chapter, I will argue that for the Truku peoples, specifically the Bsngan Tribe, the Asia Cement Case is part of a long and painful history of environmental injustice that began land dispossession and colonization in the 1890’s.

I will begin this chapter with a brief timeline of Taiwan’s colonial periods and explain how each period directly impacted all Indigenous peoples in Taiwan. Then, focusing specifically on the Truku peoples, I provide examples of policies and events that took place during three distinct time periods: the Japanese colonial period, the Chiang Kai-Shek and KMT colonial period, and the period of time from Democratization through present day. Each of these policies and events, I argue, is direct result of various colonial governments’ desire for resource development and settlement on Truku lands via land extraction and control. Using Gilio-Whitaker and Whyte’s theoretical interpretation of settler colonialism and land dispossession as an environmental injustice, I argue that since the arrival of colonial powers in Taiwan, the Truku peoples have repeatedly experienced



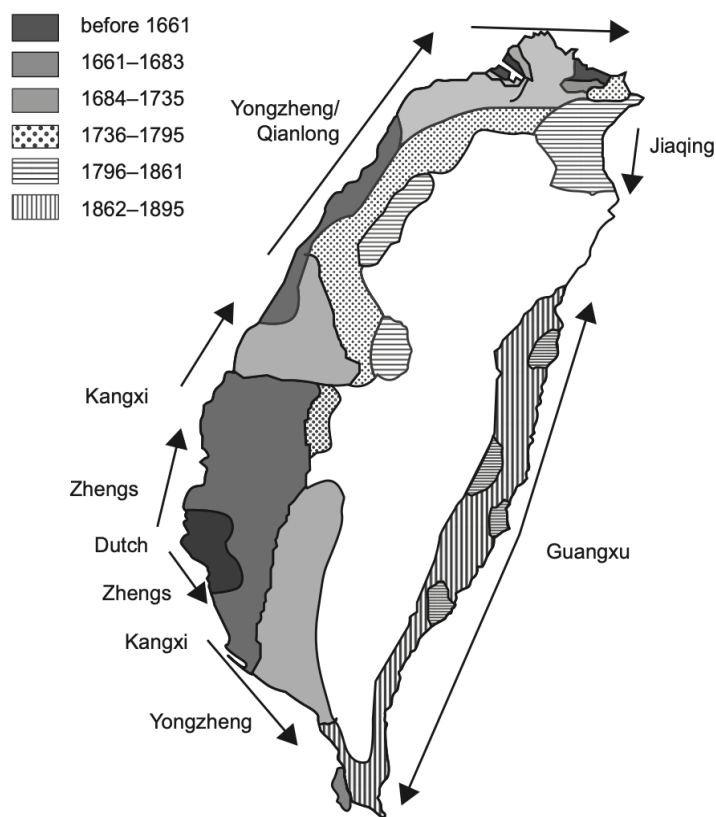
environmental injustice through the exploitation and extraction of land and natural resources, an injustice that continues today at the Xincheng Asia Cement mining site. Finally, I identify several ways that the Truku peoples have resisted and continue to resist environmental injustice resulting from settler colonialism and land dispossession in a way that ensure their futurity.

### **Taiwan's Colonial Periods: A Brief Timeline**

The land that is today called 'Taiwan' has been continually colonized by a variety of powers and governments, chronologically including Spain, the Dutch, Zheng Cheng-Gong, the Qing Dynasty, the Japanese Empire, the Kuomintang Government, and the current Democratic Progressive Party (Mona, 2007, p. 90). Before these colonial powers arrived, Indigenous people lived on the island for at least five thousand years (Mona, 2007, p. 89). During this time, they developed their own knowledge systems and structures of governance. Colonial powers have only occupied Taiwan for less than 500 years, a blink of the eye when compared to the millennia Indigenous peoples have called Taiwan home. Thus, Indigenous people have had thousands of years to develop a relationship with the land and intimately learn how to survive and exist in a sustainable manner, unlike the colonial powers that arrived much later.

In figure 4, Ye (2019) depicts Spanish, Dutch, Zheng Cheng-Gong, and the Qing Dynasty expansion and colonization in Taiwan (see figure 4) (p. 34). Prior to 1875, colonizers almost exclusively settled on the western coast of Taiwan and forcibly removed the Pingpu Indigenous peoples from their lands, relocating them into the foothills of the central mountains. The Indigenous groups living in the mountains of Taiwan were largely left alone to self-govern, mainly due to fear of conflict between colonists and the mountain Indigenous groups who were powerful and strongly defended their lands. However, in 1875, the Qing Dynasty government abruptly shifted strategies

and decided to open up the mountains through the “Opening up the Mountains and Pacifying the Aborigines” policy (開山撫番) (ibid, p. 42; National Palace Museum, 2022). As part of this policy, the Qing Dynasty constructed roads and attempted to colonize mountain and east coast Indigenous peoples, leading intense conflict. At the same time, Japanese forces began to invade Taiwan and ultimately succeeded, forcing the Qing Dynasty government out and beginning the Japanese colonial period.

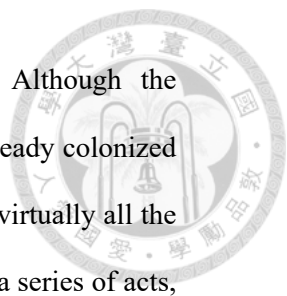


Map 1.4 Spread of settlement

Figure 4: Spread of colonization in Taiwan from pre 1661-1895, Ye (2019, p. 34)

During the period of Japanese colonialism, which began with the establishment of treaty rights in 1895, settlers started encroaching on mountain Indigenous homelands. Using the same logic as the English and the French, the Japanese implemented the “Doctrine of Discovery” and declared Indigenous lands *terra nullius* or unoccupied (Mona, 2007, p. 95). Doing so enabled the Japanese to declare all Indigenous lands ‘state

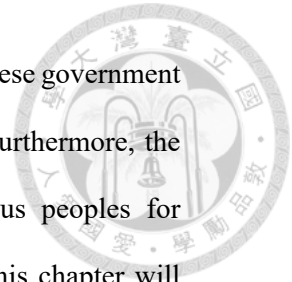




owned' and strip the Indigenous communities of their homeland. Although the Indigenous peoples fought back, by the 1930s, in addition to the land already colonized under the Qing dynasty period, the Japanese managed to gain control of virtually all the mountainous terrain in central Taiwan (ibid; Ye, 2019, p. 202). Through a series of acts, policies, and assimilation strategies, they established aboriginal reserves and forcefully removed all of the mountain Indigenous peoples into the foothills. This enabled them to use the now 'government owned' land to develop enterprises, extract resources, and obtain wealth. The Japanese extracted resources from this up until the end of World War II, when in 1945 the Japanese surrendered Taiwan back to Chinese control via the KMT party.

Just four years later, General Chiang Kai-shek's escape from now communist China led to the permanent establishment of the Nationalist Party (KMT) in Taiwan. Many of the same political strategies used by Japanese colonizers regarding land management and treatment of Indigenous peoples carried over into the Chiang Kai-shek political regime and martial law, resulting in the continued exploitation of land and assimilation of Indigenous peoples (Mona, 2007, p. 99). After Chiang Kai-shek's death, Taiwan underwent a transformation into a democratic nation with two prominent parties, namely the KMT and the Democratic Progressive Party (DPP), along with several smaller parties. Mona refers to this period of history as the stage of 'negotiation' colonization, and up until this day he believes "the indigenous peoples of Taiwan have not been consulted and have not participated in the making of the R.O.C. Constitution and indigenous legislation" (ibid, p. 100).

The current president of Taiwan belongs to the DPP, and in recent years, the Taiwanese government has consistently stated its dedication to safeguarding Indigenous rights. This commitment is exemplified through the enactment of the Indigenous Peoples



Basic Law in 2005, which recognizes the relationship between the Taiwanese government and Indigenous peoples as a 'government to government' partnership. Furthermore, the government has formally acknowledged and apologized to Indigenous peoples for historical wrongdoings. (The Indigenous Peoples Basic Law). Yet as this chapter will reveal, the legacy of years of colonial history has strongly impacted Indigenous peoples today. Furthermore, although the government has engaged in negotiations and acknowledged past wrongdoing, Indigenous nations in Taiwan continue to experience ongoing colonialism within a settler colonial state. Taiwan, in many ways, has failed to take full accountability for its actions and adequately address the persistence of colonization. This ongoing colonialism has resulted in layers of environmental injustice stemming from the exploitation of land and resources that have yet to be properly addressed.

In the remainder of this chapter, I give a timeline of incidents and policies that led to Truku land loss and resource extraction on Truku lands. I will use Whyte's (2016) explanation of environmental injustice as "settler colonialism [that] wrongfully interferes with and erases the socioecological contexts required for indigenous populations to experience the world as a place infused with responsibilities to humans, nonhumans and ecosystems" to understand Truku peoples experience of settler colonialism (p. 3). I will further employ Gilio-Whitaker's (2019) understanding of environmental injustice originating for Indigenous peoples as "dispossession of land in all forms...that systematically erases Indigenous people's relationships and responsibilities with their ancestral place" to understand how land dispossession continued through the Asia Cement Case represents an environmental injustice for the Truku peoples. In this chapter, I aim to provide the necessary context to understand the deeper historical and present-day

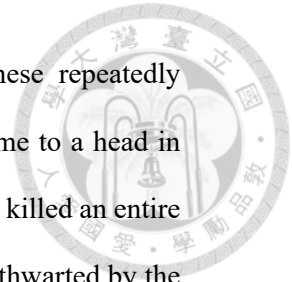
environmental injustice that the Asia Cement Case represents and why so-called solutions and future development, such as EJ and SD must address these underlying conditions.

### **Japanese Colonial Period: Loss of Land, Relocation, Assimilation (1895-1945)**

Prior to the Japanese colonial period, the mountain Indigenous groups including the Truku peoples were for the most part left to govern themselves by both settlers and colonial governments. However, everything changed rapidly once the Japanese were in power. From the beginning, they intended to colonize the entirety of Taiwan for resource extraction, which can be understood by the following excerpt from a Japanese newspaper ‘Jiji shinpō’, published in the beginning of colonial reign in Taiwan: “in order to pacify the island and develop the rich resources with the hands of our Japanese people, the goal of managing Taiwan should focus solely on the land while ignoring the natives” (as cited in Ye, 2018, p. 192).

Ye (2019) argues in her book *The Colonisation and Settlement of Taiwan, 1684–1945* that “all Japanese actions regarding land had a clear objective of exploitation” and furthermore, “the purpose of aboriginal management was to develop aboriginal land” (p. 193). She shares findings that support her argument, “camphor manufacture, forest management, land reclamation, agricultural outputs, mining and even the settlement of Japanese migrants were all dependent on successful management of the aborigines. It was in terms of exploitation that the Japanese government recognised the importance of bringing the mountain aborigines under control” (ibid).

While territory acquisition might have been the goal of Taiwan’s colonization, the reality of the situation was that the Indigenous peoples in Taiwan, particularly the mountain Indigenous peoples, were incredibly powerful and dedicated to defending their land and way of life from Japanese colonizers. This became obvious to Japanese colonizers during the Xincheng Incident. The Truku peoples in the Xincheng area (where

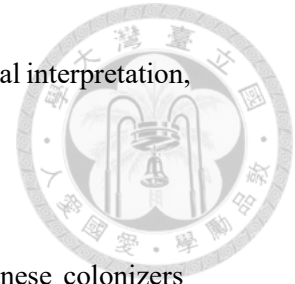


ACC's Hualien factory is today) were deeply angered by the Japanese repeatedly trespassing on their lands and assaulting their women, which finally came to a head in 1896 (Lo, 2013, p. 40; Pan, 2018, p. 33). The Truku peoples attacked and killed an entire garrison. Although the Japanese retaliated, their actions were repeatedly thwarted by the Truku peoples. The Japanese ultimately admitted defeat, withdrew their troops from the mountain areas.

However, the Japanese were determined to gain control of land and by extension, resources. A quote from Japanese government official, Takekoshi, reveals this, “[Land] above 1,500 and below 3,500 feet is swathed in dense forests teeming with large and valuable trees, in particular camphor trees...The key to the infinite wealth of [Taiwan] will only be obtained by opening up the savage districts” (as cited in Lo, 2013, p. 44). Of particular interest was the Truku homelands which can be understood by a quote from General Sakuma: “The gold in the Taroko area should be valuable enough to be able to balance all of our national debts” (as cited in Lo, 2013, p. 46). Thus, the Japanese regrouped to develop a new strategy for colonization.

For the remainder of this section, I will describe three distinct periods of colonialism the Truku peoples experienced: loss of land, forced relocation, assimilation. I will argue that the Japanese government's “objective of exploitation” repeatedly took the form of extractivism: extraction of camphor wood, gold, and minerals. Each of these examples of extraction began with the dispossession of Indigenous land. Furthermore, the Japanese employed genocide and assimilation tactics to weaken Truku peoples' power, which that resulted in the forced separation of Truku peoples from their language, cultural practices, and communities. Thus, Truku peoples' loss of language, culture, and community through genocide and assimilation which is very prevalent today, is directly

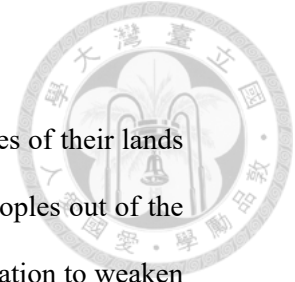
tied to land dispossession. Through Gilio-Whitaker and Whyte’s theoretical interpretation, this is an environmental injustice.



#### **Loss of Land: 1900’s-1914**

Following their defeat in the Xincheng Incident, in 1903, Japanese colonizers began to isolate the Truku peoples from other Indigenous groups and trading routes. Using electric guard lines and dynamite, the Japanese restricted the Truku peoples hunting and living space by barricading them into a confined space (Lo, 2013, p. 45; Ye, 2018, p. 193). Next, they launched a “Five Year Plan” to gain power over the Truku homelands to acquire resources (Ye, 2018, p. 3; Simon, 2006, p. 410). During the time period from 1910–1914, the Japanese conducted military attacks and raids in Truku territory, which were vehemently resisted (Ye, 2018, p. 193). In 1914, the Japanese staged an all-out war on the Truku peoples, simultaneously attacking from the South and West via four different routes in the area known today as Taroko Gorge (Fact Finding Report, 2022, p. 25; Simon, 2006, p. 7). Despite the Truku peoples putting up a fierce resistance for seventy-four days, the Japanese ultimately defeated the resistance and control over the remaining Truku homelands (ibid).

For the Truku peoples, the consequences of losing land directly interfered with Truku relationships and responsibilities to their ancestral place. One example of this was through Gaya, the laws and regulations guiding Truku lives. Within Gaya there are strict regulations as to how Truku people are supposed to protect their land and disobeying these laws or failing to uphold them can have consequences for generations to come (Truth Investigation Report, pg. 51). Thus, the Truku peoples experienced environmental injustice through the loss of their land because their ability to live their lives and follow the regulations of Gaya was directly interfered with and erased by land dispossession.

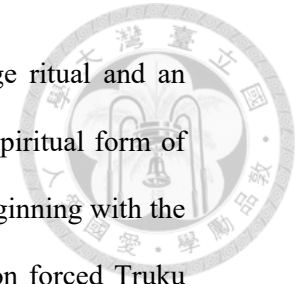


### **Forced relocation: 1910s-1930s**

For the Japanese, the ultimate goal of dispossessing Truku peoples of their lands was resource extraction. In the following decades, they forced Truku peoples out of the mountains and into the foothills, dividing tribes into different village location to weaken their power. During this forced relocation, an estimated 80,000 Indigenous people were forced out of their homelands, previously nearly 14% of Taiwan's landmass. In 1928, the Japanese officially divided the newly non-settled and acquired mountains into three categories: land to be preserved as forests 「要存置林野」, land to be used for the development of extractive industries 「不要存置林野」, and finally, land that would be allocated for use by Indigenous communities 「準要存置林野」 (Fact Finding Report, 2018, p. 27).

The Japanese resettled the Truku peoples in the foothills of the mountains into small tracts of lands, where they allocated usufruct rights to individuals for the purpose of farming and living. In total, the Truku peoples were left with access to land merely half the size they had previously occupied, with each person permitted to use a maximum land use area of 3 hectares (Fact Finding Report, 2022, p. 28; Ye, 2018, p. 204). By the mid 1930's, nearly all of Truku peoples were removed from their homelands and relocated into the foothills. The Japanese used the land that had been previously occupied by Indigenous communities, now divided into forest preserves and land for resource extraction, to meet the demands of the rapidly growing camphor wood industry that continued through the remainder of the Japanese colonial period.

Relocating to new lands had many consequences for Truku peoples but one prominent change was removing Truku peoples from their hunting and ancestral grounds. Hunting is central to the Truku identity, as can be understood by this quote: "For indigenous people, hunting is not about killing animals, but rather about sociality and



identity. For many young men, hunting is an important coming-of-age ritual and an opportunity for intergenerational transmission of knowledge... It is a spiritual form of communication with ancestors and mountain spirits” (Simon, 2015). Beginning with the electric guard lines, Truku freedom to hunt was hindered but relocation forced Truku peoples to leave their hunting grounds. In fact, the Japanese encouraged the Truku peoples to instead pursue farming, further separating Truku peoples from their hunting culture. Thus, the Japanese wrongfully interfered the ‘socioecological contexts’ required for Truku hunters to experienced their ‘world as a place infused with responsibilities to humans, nonhumans and ecosystems’, an environmental injustice according to Whyte (2016).

#### **Assimilation: 1930s-1945**

The Japanese assimilation movement was for all inhabitants of Taiwan but also directly targeted Taiwan’s Indigenous populations. While assimilation policies began almost as soon the Japanese established Taiwan as a colony, perhaps the most famous policy was the “Kominka Movement” that wasn’t established until 1937 (Lee, 2012, p. 120). This movement was designed to “transform the Taiwanese into “authentic Japanese” (ibid). Assimilation policies in this movement included religious reform, the national language movement, the name-changing campaign, and the recruitment of military volunteers (Ru, 2010, p. 86).

The far-reaching impacts of this movement and cultural genocide are very obvious in Truku communities today. One obvious consequence of the promotion of the national language movement was the beginning of decades of language loss. Today, the number of Truku peoples that can speak their native language declines each year. According to one study, the Truku is categorized as a ‘definitely endangered language’, and is only spoken by the parental generation and above (Tang, 2014, p. 7). When language is lost or

endangered, there is not just the loss of words, but also the loss of culture and knowledge contained within this language.

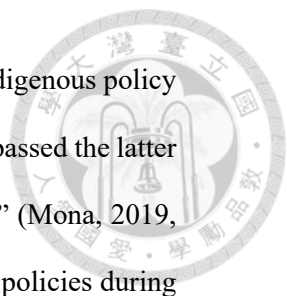
Another consequence of this cultural genocide was the forced remove their Truku facial tattoos, a process that led to permanent scarring for many. This was not only a traumatic and painful process but furthermore directly interfered with Truku peoples' ability to practice Gaya. According to Truku elder Kimi Sibal, “when a tribesman dies, his ancestor spirit will wait for him on the other end of the rainbow. If the deceased has facial tattoo, the ancestor sprit will lead his spirit to the other end of the rainbow bridge. Otherwise, the deceased has to go a roundabout way with toils to get to the other world of the spirit” (Sibal, p. 8). During the time of Japanese colonialism, the art of facial tattoos “became identified by people as backwards, superstitious, and a symbol of incivility” and the traditional custom and methods of tattooing were completely erased (p. 18).

Through Japanese assimilation methods, the Japanese government was able to retain their control of Indigenous lands and further resource extraction. The consequences of these assimilation measures however, were devastating for the Truku peoples. Loss of language and loss of tattoo culture systematically interfered with and to some extent, erased Truku relationships and responsibilities with their ancestors and traditional law of Gaya. Through the work of Gilio-Whitaker, this can be interpreted as an environmental injustice.

### **Chiang Kai-shek and KMT: Genocide and Industrialization (1945-1980s)**

When Japan renounced Taiwan as their colony, many of the assimilation and land management policies designed to further pursue resource extraction were carried over into Chiang-Kai Shek and the KMT's ruling of Taiwan. The Mountain Reserve Policy that was implemented resulted in an almost identical management of land to that of the Japanese, with the continued relocation of Indigenous communities out of the foothills





and further into the flatlands. In the words of Awi Mona, “The KMT’s indigenous policy was the direct heir of its totalitarian Japanese predecessor, and indeed surpassed the latter in planning and implementing its goal of assimilating indigenous people” (Mona, 2019, p. 662). This section will delve into more details surrounding events and policies during this period of history that contributed to the further exploitation and extraction of land and resources from the Truku peoples, which can be understood as an environmental injustice.

### **Stamping out Indigenism: The Shouren Case**

When the KMT first colonized Taiwan following WWII, there was widespread dissatisfaction from the vast majority of Indigenous peoples. A movement for Indigenism and autonomy had been building, despite suppression from Japanese colonizers. At the time, Indigenous leadership was strong and Indigenous groups were actively working to regain their lands. Indigenous groups were worried that new colonizers would interfere or prevent this. In fact, this fear was well founded as shortly after moving to Taiwan, Chiang Kai Shek established martial law in 1949 that persisted in Taiwan for nearly four decades.

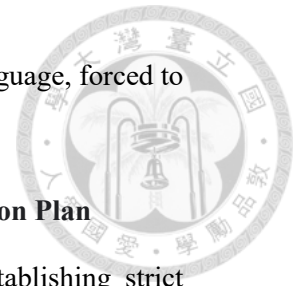
To quell the organizing of Indigenous groups, in 1954, the KMT government arrested eight prominent Indigenous leaders and sentenced six of them to death on the charge of ‘rebellion and corruption’ in the Tang Shouren Case (Tai and Chen, 2014, p. 59). Then, to prevent protests and uprisings following the execution, a responsive plan including secret surveillance, forced division of community members, and control of traffic and access of the Indigenous communities was instituted (National 228 Memorial Museum). The Tang Shouren Case and KMT policies had far reaching consequences for Indigenous groups across Taiwan, including the Truku peoples, who had just lost several important leaders and were again forced into strict assimilation programs with constant

surveillance. Indigenous peoples were again forbidden to speak their language, forced to learn a new language, and forced again to change their names.

### **Industrializing the East: The Six-Phase Economic Construction Plan**

After subduing the organization of Indigenous groups and establishing strict assimilation measures, the KMT government had control over the mountain regions. According to the Truth Investigation Report, sometime in the 1950's, the KMT government instituted a six-phase economic construction plan at that time for developing resources in the eastern part of Taiwan. By releasing the stocks of the four major public enterprises (including cement, paper, agriculture and forestry, and industrial and mining companies), the government enabled the development of these industries (Truth Investigation, 2022, p. 69). According to one source, for Taiwan, “the environmental crisis had its origin in... this state-led industrialization strategy [that] put economic development as the first and foremost objective that should be pursued at any cost. Tens of thousands of small enterprises sprang up all over the island, without proper registration and environmental regulation” (Tong, 2005, p. 172). One result of this action was the approval of the first official twenty-year lease for the extraction of Cement material from the Fushi area 1957-1977. Although mining did not begin at this site for almost another twenty years, this lease was carried over as the same lease that Asia Cement holds today.

Under the leadership of Chiang-Kai-Shek and the KMT party, the Truku peoples once again faced assimilation and cultural genocide. Like the Japanese, the KMT government employed these tactics to exercise control over land and continue the process of Indigenous land dispossession for resource extraction and development. Thus, the environmental injustices originating from the time of Japanese colonization continued to prevail.



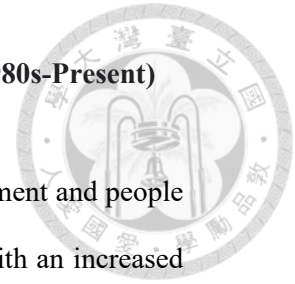
## **Democratization: Eastward Expansion and further Loss of Land (1980s-Present)**

### **Eastward Expansion and Industrial Development**


In the 1980s, Taiwan was in a period of rapid industrial development and people were beginning to notice the environmental impacts. This, combined with an increased global awareness for environmental issues and the end of martial law in Taiwan created the perfect storm for pro-environment demonstrations. According to one source, there were 1,211 local anti-pollution protests between 1980 and 1996 (Tong, 2005, p. 173). During this time in 1990, after visiting Hualien, Taiwanese president officially introduced policy for the shift of industrial development from the Western coast of Taiwan to the East coast. Central to the success of the Eastern Expansion policy was the availability of vast areas of Indigenous lands, initially seized by the Japanese government, which remained under government control and were suitable for industrialization.

In the Truth Investigation Report, the authors point out that ACC officially acquired mining rights and opened the Xincheng Mine in 1973, preceding the policy for eastward expansion. However, they also write that ACC claims to have opened the Xincheng Mine in response to governmental incentive and encouragement for eastward expansion (Truth Investigation, 2022, p. 68). Either way, there is an undeniable connection between the government and Asia Cement working closely to develop Asia Cement's Xincheng Mine, using areas of Indigenous lands, initially seized by the Japanese government.

To summarize, the government's industrial eastward expansion, utilizing Truku lands seized for development, alongside the occurrence of pro-environment demonstrations, represents a clear environmental injustice. As stated by Gilio-Whitaker, the dispossession of Indigenous lands alone is an injustice, but it is further exacerbated by the shift of industrial development from areas where environmental impacts were protested vocally to these Indigenous lands.

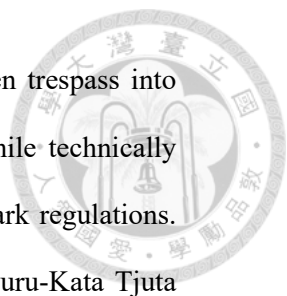


### **Taroko National Park: Land Extraction**



Another example of the continuous extraction of land from Indigenous peoples can be found in the case of Taroko Gorge National Park, one of the most famous tourist destinations on the East Coast of Taiwan. The first version of this park was developed during Japanese colonialism, but the present-day version of Taroko Gorge was founded in 1986. The description of the park seems ironic when considering the colonial history, “it was of special significance for the environmental protection movement in Taiwan: it showed that both the public and the government agencies had realized that against the background of the nation's four decades of extraordinary economic success, serious damage was being done to its natural resources” (Taroko Gorge National Park). The land conserved in the creation of the park is Truku land confiscated by the Japanese and retained by the government, still within the park are Truku historic sites of past settlements and there are even currently people living in villages up in the mountains within the park.

In 1994 members of the tribe officially petitioned the government for exclusive hunting areas, but the government used the “Wild Animals Act” to deny this claim (Lo, 2013, p. 166). Today, within Taroko Gorge National Park, there are strict regulations for proper use of the land that forbid: Any display, sale, transport, or collection of animals, plants; the use of any hunting equipment; political activities and actions with the potential to cause social disputes or conflict (Taroko Gorge National Park). For the Truku peoples these new rules deeply restrict their ability to exercise their culture “experience the world as a place infused with responsibilities to humans, nonhumans and ecosystems” (Whyte, 2016, p. 3). Moreover, the establishment of Taroko Gorge National Park introduces an additional dimension of environmental injustice by imposing regulations that not only limit Truku people's access to their land and culture but also prevent them from



implementing their own forms of governance. As a result, tourists often trespass into culturally significant areas against the wishes of the Truku people, while technically staying within the boundaries defined by governmental and National Park regulations. This is a very similar situation to the case of the Anangu people in Uluru-Kata Tjuta National Park as described by Whyte (see chapter 2, page 26).

### **Historical Summary**

I began this chapter with a Taiwan's colonial history focusing exclusively on the experience of Indigenous peoples. I then introduced several policies from Japanese colonization that resulted in Truku land dispossession, forced relocation, and assimilation. I argue that the motive for each of these policies was initially to gain control of Indigenous territories in order to "develop the rich resources" contained within these lands. As Gilio-Whitaker argues, settler colonialism with the ultimate goal of access to territory creates an environmental injustice and as Whyte argues, this environmental injustice directly interferes with "socioecological contexts" that are required for the Truku peoples to experience the world through the laws of Gaya, with specific examples such as the forced removal of facial tattoos and assimilation that interfered with Truku language acquisition.

Following the Japanese colonial period, I argued that the regime imposed by Chiang Kai-shek and the KMT government on the Truku peoples was remarkably similar to the colonization tactics imposed by the Japanese with the same goal of land acquisition. For the Truku peoples, these colonization tactics resulted in genocide and industrialization of their lands. Again, I argued that the ultimate goal of these policies was the acquisition of Indigenous territories for resource extraction.

Finally, I gave an overview of policy and events in recent history (1980's and beyond) including the Eastern Expansion Movement and the development of Taroko Gorge National Park. Both of these policies, I argue, were ultimately about government

control of Indigenous territories and the consequences of these policies continue to interfere with the Truku peoples' ability to exercise their culture and experience the world through their laws of Gaya.

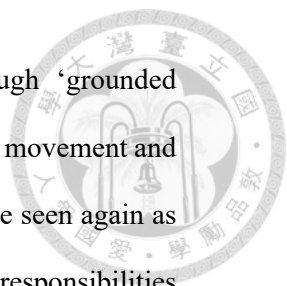


### **Truku Resistance to Land Dispossession**

While in this chapter I have written primarily about actions taken by colonizing governments that resulted in Indigenous land dispossession, it is essential to recognize that from the beginning, these actions have and continue to be met by Truku resistance. Some examples I mentioned in this chapter include mountain Indigenous groups fighting settler encroachment during the Qing Dynasty, the Xincheng Incident, the movement for Indigenism that began under the Japanese colonial period and continued into the Chiang Kai-shek and KMT colonial period. Examples today include resistance to mining through the Anti-Asia Cement Return My Land movement and protests against the hunting ban in Taroko Gorge National Park.

Applying the theoretical framework developed in the previous chapter, I believe each of these examples of resistance can be understood as Indigenous futurity as in each example, Truku peoples are prioritizing their culture and identity, self-determination and the pursuit of community well-being through place-based processes rooted in Indigenous knowledge. For example, fighting settler encroachment is, under Gaya law, a *responsibility* that must be undertaken to defend hunting territory from individuals who are not part of the tribe and are trespassing (Truth Investigation, 2022, p. 51). The Qing Dynasty and the Japanese were both challenged by the Truku peoples in response to trespassing and causing harm to Indigenous territories.

Furthermore, the movement for Indigenism that sparked under Japanese colonialism and was later violently suppressed during martial law was an effort by many Indigenous peoples to regain control of territories and begin a resurgence of Indigenous language and culture (National 228 Memorial Museum). This could be interpreted as



‘sustainable self-determination’ or perhaps ‘radical resurgence’ through ‘grounded normativity’. Protests to mining by Asia Cement in the Anti-Asia Cement movement and protests to laws forbidding hunting in Taroko Gorge National Park can be seen again as actions by the Truku peoples to defend their territory and exercise the responsibilities they have under Gaya and restore sustainable relationships. I believe each of these examples can be understood as actions for Indigenous futurity that opposes the structure of environmental injustice and settler colonialism.

Yet resistance to settler colonialism and the structure of environmental injustice it creates is multifaceted. That is, there is not one pathway and there are many factors that need to be considered. From the above examples, it is clear that the return of land and the ability to self-determine how Indigenous territories are managed is one aspect of resistance to environmental injustice. However, movements for Indigenism that involve language and culture revitalization or the restoration of hunting practices are also examples of resistance to the structure of environmental injustice created by settler colonialism. Consequently, there is not one so-called ‘solution’ to addressing the environmental injustice Indigenous communities face. In order to address environmental injustices, a multidimensional approach that balances the needs of communities needs to be taken.

### **Conclusion**

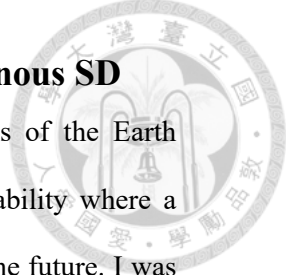
In this chapter, I have provided the necessary historical context to understand the Asia Cement case and the years of settler colonialism that created a structure of environmental injustice perpetuated in this case. I have also argued that Indigenous resistance to this structure through pathways that center the needs of Indigenous communities can be viewed as Indigenous concepts of futurity. Lastly, I have pointed out that each of these examples reveals that resistance to settler colonialism and the structure of environmental injustice it creates is multifaceted. Therefore, I believe it is crucial to

adopt a multidimensional approach that begins with a deep understanding of the needs of Indigenous communities for future SD. This approach must acknowledge and address past environmental injustices while also preventing the occurrence of further injustices.

In the following chapter I will conduct an in-depth analysis of Bsngan Truku visions for Indigenous SD using the “Tribes' 30 Demands for ACC for the 2021 Consultation Process” (Appendix A), supplemented by quotes or perspectives from tribal members found in the media. Then, using the “2021 Asia Cement Sustainability Report” and the “10+11 Benefits Sharing Mechanism” I will evaluate ACC vision of Indigenous SD, supplemented by data found on the ACC website. After this analysis, I will compare these two versions to see if Indigenous SD and EJ is achieved in the Asia Cement Case for the Truku people and ACC.

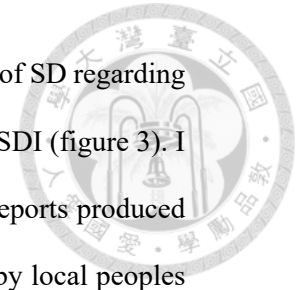


#### **4: Truku Bsnagan Tribe's and ACC's visions for Indigenous SD**



In April of 2023, I attended a presentation hosted by Citizens of the Earth Foundation discussing industrial transformation, Net Zero and sustainability where a representative from ACC shared the company's vision and strategy for the future. I was somewhat dismayed, but not surprised, to find that the vast majority of presentation was focused on Net Zero and technological solutions. While SD was mentioned several times in the ACC presentation, the presenter repeatedly emphasized that it is the responsibility of everyone to incorporate SD into their own lives and ended the presentation by asking, the audience, what have you done now, and what will you do in the future to address climate change? This felt somewhat ironic, given that ACC along with Taiwan Cement Corporation, and Zhonghua Pulp Corporation are the main sources of emissions in Hualien and combined, account for a staggering 92.6% of the total greenhouse gas emissions in all of Hualien County (Hualien's 2022 SD and Net Zero Conference).

I found that the ACC presentation did not incorporate or even address the social or community impacts of their operations. The audience was particularly frustrated by this and asked many questions related to the Asia Cement Case. Leaving the presentation, I wondered if in my thesis, I would even be able to compare ACC and Truku visions of SD, or if my research proposal was impossible. Perhaps corporate sustainability was a completely different language than Indigenous SD and there was no way to find common ground. But the more I thought about this, the more recognized that this is exactly why this analysis is important. ACC and the Bsnagan Truku Tribe quite literally exist on the same ground and thus, there needs to be overlap in both stakeholder's visions for SD in order for them to mutually exist.

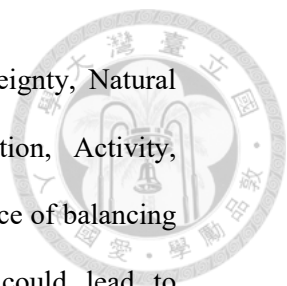


In this chapter, I will analyze ACC and Truku conceptualizations of SD regarding future mining operations in the Asia Cement Case using Dockry et al.'s SDI (figure 3). I will do this through a document analysis using official statements and reports produced by each stakeholder directly addressing SD, supplemented with quotes by local peoples or officials found in the media. Firstly, for the Bsngan Truku Tribe's perspective, I will be using the "The Tribes' 30 Demands for ACC for the 2021 Consultation Process" Published by the Citizens of the Earth Foundation, provided by the Bsngan Tribal Conference (年諮商程序之部落向亞泥提出的 30 點條件) (Appendix A) as my primary source.<sup>6</sup> I will also use quotes and information from the Truth Investigation Report as they pertain to or are referenced in various points in analysis, and quotes from tribal members in the media. Secondly, for ACC's perspective, I will use the "2021 Sustainability Report" and "10+11 Benefits Sharing Mechanism" published by ACC (Appendix B).

All of these documents will be analyzed using the theoretical framework in the section "Indigenous Futurity: Alternatives to SD" from chapter 2 and specifically, Dockry et al.'s SDI (figure 3) (see page 35). The reason I will be employing this framework is because it is undeniable that the ACC's mining operations have become an integral part of the Truku community. Although ACC is also a stakeholder in this case, operations of ACC will have the largest impact on future conditions and development in the Bsngan community surrounding the mine because the area is Indigenous homeland. In the future someday, ACC's mine is likely to close. However, the community will still remain. Thus, it is necessary to view this case in an Indigenous framework that prioritizes Indigenous futurity and alternative definitions of SD to account for Indigenous needs that are not included in mainstream conceptualizations of SD.

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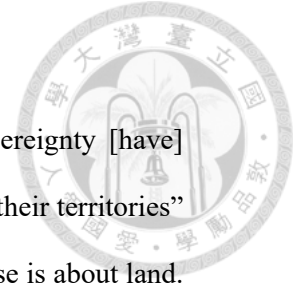
<sup>6</sup> This report will be referred to as the "Consultation Report" for the remainder of this chapter



Dockry et al.'s SDI is divided into six parts: Land and Sovereignty, Natural Environment, Institutions, Technology, Economics, Human Perception, Activity, Behavior (figure 3). The creators of this model emphasized the importance of balancing the tensions among elements, arguing that an unbalanced model could lead to unsustainable conditions. Furthermore, the model consists of "highly interrelated dimensions" which is relevant to this case as there is extensive overlap between categories. The SDI is just one example of an Indigenous centered alternative to mainstream SD conceptualizations that I proposed in my theoretical framework. For the scope of this thesis, I believe using this one model allows me to do a more thorough analysis. However, I believe it is worth noting that this is just one mode of analysis and other versions of Indigenous SD can and should be applied in the future, that may produce very different findings, to better understand this case. A summary table of my findings from this document analysis can be found in appendix C.

### **Truku Indigenous SD**

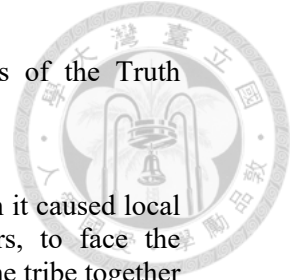
For Truku peoples, the Asia Cement Case is highly controversial. While the media often portrays this case as a conflict between villagers who are for and against mining operations, the reality of the situation is not so simple. The impacts of ACC operations extend beyond the mine itself and directly impact the day-to-day lives of all community members in more ways than one. Many of the ways that tribal members have discussed this case in the public eye directly center on how operations impact the future development or sustainability of their families and community. In this section, I will explore some of these statements to provide a clearer understanding of how the Truku peoples are framing conversations about their future development and sustainability in regards to ACC's mining operations in their community.



## Land and Sovereignty

In the SDI model, for Indigenous communities “land and sovereignty [have] specific legal and cultural meanings” related to “sovereign control over their territories” (Dockry et al., 2015, p. 129). Ultimately, at its core, the Asia Cement case is about land. Additionally, in Chapter 3, I included a historical overview and argued that land dispossession and settler colonialism are the direct cause of environmental injustice in this case. In order to comprehend the relationship between land and sovereignty in this case, it is important to consider Truku knowledge. The Truku people perceive land through a management system guided by the laws of Gaya, which prioritize the coexistence of collective ownership and individual ownership. This system establishes a framework of property rights and mutual sharing of natural resources and traditional culture among tribal members (as referenced in the Truth Investigation Report, p. 57). Unlike non-Indigenous contexts, the Truku tribe does not view “land” as a commodity or something exclusively owned by individuals. While not all Truku people adhere to the laws of Gaya in the same manner, Truku culture and history is inextricably linked to land.

Presently, the Truku people possess limited capacity to oversee and determine the utilization of land currently being mined. Although the tribal vote on the continuation of mining operations provided some level of tribal autonomy, concerns remain regarding the fairness of the voting mechanism (Presidential Commission on Historical Justice and Transformational Justice for Indigenous Peoples, 2022, 31:00). As is such, the ability of the Truku community surrounding the mine to assert sovereign control over their territory and manage the land according to cultural meanings and traditional practice is constricted. This restriction is directly mentioned within the “The Tribes' 30 Demands for ACC for the 2021 Consultation Process.” The very first item of consultation with ACC addressing



the status of future operations is to meet the four recommendations of the Truth Investigation Report:

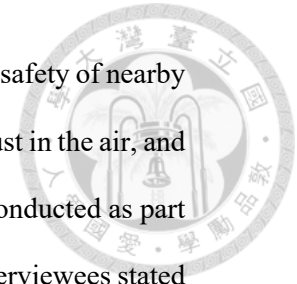
“To confront the injustices of past land acquisitions and the harm it caused local Indigenous Peoples, to return the land to its original owners, to face the transformation of the mine and sustainable development within the tribe together alongside the tribe, to respect tribal sovereignty and practice consultative consent as stipulated by the Indigenous Peoples Basic Law” (Appendix A, p. 107)

The first and second recommendations directly address tribal management of land, and the final recommendation addresses sovereignty. Through this item of consultation, the tribal council is stating as a prerequisite to the consultation process with ACC, these requests need to be addressed. As such, Indigenous SD in regards to land sovereignty in this case demands that past land injustice be faced, land return should be initiated, and Indigenous sovereignty should be respected.

This section of analysis reveals that for several Truku tribal members, the ACC’s future land use for mining operations is directly connected to ancestral teachings of Gaya, sovereignty, and life. Furthermore, facing the historical injustice of land acquisition is also addressed. In the previous chapter, I argued that this historical injustice is an environmental injustice. Therefore, the statements by the Truku Bsgnan tribal council articulate that environmental injustice, Truku knowledge from Gaya, Indigenous sovereignty, need to be addressed in order for there to be SD between the village and ACC.

### **Natural Environment**

In the SDI model, ‘natural environment’ “is broadly interpreted to go beyond natural resources to include examples such as people, human communities, plants, animals, rocks, water, and air” (Dockry et al., 2015, p. 130). In the Truth Investigation, authors include these different factors in relation to the safety of tribal members in the past and the future. In 1976, tribal members filed a formal complaint to the local



government, expressing concern that ACC's operations have affected the safety of nearby villages both physically and mentally. Concerns included air pollution, dust in the air, and crushed stone falling (Truth Investigation, 2022, p. 101). In interviews conducted as part of the Truth Investigation with tribal members that live near the mine, interviewees stated that when ACC began operations, the once beautiful living environment was full of the sound of explosions from mining ore falling boulders which not only restricted the original cultivation of land but also caused residents to panic and fear for their safety. Some tribal members were even forced to move into new homes because of debris falling on their previous homes (ibid).

A member of the Truku tribe addresses a different way that ACC's operations factor into the natural environment. In a news report presented by mirror media, this tribal member explains how ACC fills the vacancies in rural resources and public construction. For example, after a typhoon, the roads collapsed and trees fell in the village. ACC immediately dispatched heavy machinery to clean up the road and within a day, it was clear. For this tribal member who lives under the mine, Asia Cement ensures the safety of the mine, and he shared his concern that if ACC leaves, there will be no one to regulate the safety of the mine above the village (Yin, 2022). For this tribal member, the operations of ACC regarding safety that are already in place must be continued to ensure safety. Indeed, this is also included in the Consultation Report (numbers 7 and 10, Appendix A).

While Asia Cement has changed their mining operations since the 1976 complaint to approve safety measures, safety is still a serious concern for tribal members. In number 4, part 2 of the Consultation Report the tribe states, "Only when the geological safety and mining plan is guaranteed to ensure residential safety, mining area safety, and future land recovery for future generations to continue to use, can we consult and agree with full freedom and knowledge" (Appendix A, p. 108). From this quote, it is clear that looking

to the future, the tribal council has addressed that ensuring residential safety and land recovery is necessary in order to consult or agree to any future operations with ACC.

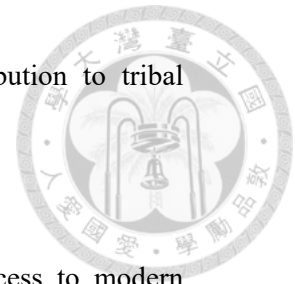
This section reveals that for the Truku village surrounding the mine, ACC mining operations have impacts that go beyond the physical resource of cement and extend into the safety and well-being of the community, landscape (plants, rocks, water, and air). In the future these impacts need to be incorporated into plans for SD.

### **Institutions**

In the SDI model, institutions can be understood as “structures that develop and enforce rules of behavior and social interactions”, such as tribal governments and schools (Dockry et al., 2015, p. 130). An example of how ACC’s operations are linked to institutions can be understood by number 18 of the Consultation Report, where the tribal council talks about the role Asia Cement has and should play in providing funding for tribal youth to attend schools. It reads, “...scholarships should be set up and open for students from Fushi Village elementary school to university” (Appendix A, p. 112). The tribal council also addresses how institutional development should be supported by ACC in the future. In number 15, the tribal council talks specifically about “historical land injustice” related to this case they believe to address these injustices, ACC should “Establish the compensation fee for historical land injustice, the benefit-sharing mechanism and residential safety management in mining area operations, and to formulate compensation and feedback methods” (ibid, p. 109). One of the ways the tribe plans to use these potential funds is for “personnel expenses and training funds for tribal youths to participate in public affairs management” (ibid).

From these conditions for consultation, it is clear that ACC is involved in institutional development via scholarships and funding opportunities, and their contributions influence community institutions. The Tribal Council has hinged future

consultation with ACC on continued support of and further contribution to tribal institutions.



### **Technology**

Technology is defined by the SDI model as “community access to modern advances” such as telecommunications, bus also, “the use of cultural tools and practices” (Dockry et al., 2015, p. 130). Two examples from the Consultation Report that draw a link between ACC and technology are number 17 and 22. In number 17, the tribal council discusses electric and water subsidies that should be provided to the community and asks ACC to “provide an electricity subsidy of X NTD per household per month, and to increase the water subsidy by X NTD per household per month. The total utility bill should be maintained at X NTD per household per month” (ibid, p. 111). In number 22, the tribal council discusses transportation: “The public bus that transports students to school from the tribal neighborhood should have a route that goes through Neighborhood 12 to 7-11 to ACC Service Center to the Kele Tribal Village; the future goal is to provide students with a direct bus to and from school” (ibid, 112). Other examples of technology advances or infrastructure included in the consultation agreement include numbers 24 and 25, related to household repairs and recycled water, respectively.

In regards to cultural tools and practices, there are two examples of ways ACC’s affect Truku tribal members' technologies. The first example is the use of land for cultivation. When visiting her land that had been used for mining, a Truku elder shared her feelings and memories from the area. She shared that there used to be more than twenty households and farm areas, recalling the names of the families. However, she ends by saying she could never take the land back because for her it is beyond recognition (Chen, 2014, 23:20). ACC’s mining operations had interfered with and restricted original cultivation of land. For this woman, the land changed so much that it was unrecognizable



and she didn't want it back because to her, it was unusable. Thus, ACC's mining operations directly interfered with her family's ability to use their cultivation technology.

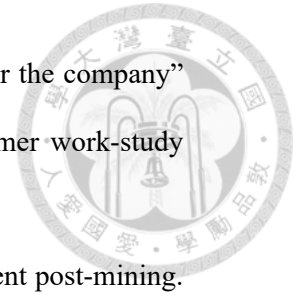
Another example is related to number 26 from Consultation Report where tribal members ask ACC "to agree to the joint management and maintenance of the ecology within ACC's mining area in accordance with the traditional domain of tribal management, and to provide the tribal with the sole responsibility of ecological maintenance and hunting management in the mining area" (Appendix A, p. 112). In this report, ACC agrees to allow hunting rifles, but mentions nothing about allowing tribal member the sole responsibility of ecological maintenance according to their own technologies.

In regards to technology, it is clear that the expectations from the tribal council are that ACC should be supporting the village via technological advances as part of their future plans for operation. In fact, ACC already incorporates some of these advances into their daily operations, budget and planning. However, it is also clear that ACC's operations have and continue to interfere with Truku technology related to cultural tools and practices, something that Tribal members have noted is necessary to resolve for future consultation.

### **Economics**

The SDI model defines sustainable economic development as "incorporates multiple scales ranging from the individual household, to the tribe, to the region, to the nation, to the globe" (Dockry et al., 2015, p. 130). The Tribal Council addresses economics related to ACC mining operations in a few ways in the Consultation Report. The first example (number 20) is related to employment: according to the tribe, ACC should "create better job opportunities and improve existing labor conditions: Asia Cement Company will actively guide the local Indigenous people to obtain the relevant

certificates required for mine work, in order to work as an employee for the company” (Appendix A, p. 111). Also, number 21 includes a condition for summer work-study opportunities for tribal students.

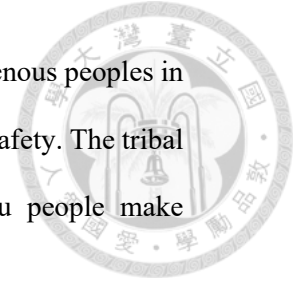


The second example is related to a plan for economic development post-mining. Number 1 addresses the recommended actions from the Truth Investigation report, one of which was working with tribal members to address mine conversion and SD. The Truth Investigation report recommends that ACC negotiate a mine transformation and land reuse plan four years before the end of mining in the mining area with the tribal community and every year, contribute a sum of money to a fund for the community that creates a balance between economic development and the traditional rights of indigenous peoples (Truth investigation Report, 2022, p. 192).

One of these conditions is related to the continuation of ACC’s operations as a form of continued economic growth and development for the tribal community via guaranteed job opportunities, while the other example looks beyond the mine at future, sustainable economic development. Together, these two conditions establish a scale of sustainable economic development that begins with the individual household but extends beyond to the tribe, region, and even potentially to the nation, and globe through land rehabilitation and disaster prevention measures in accordance with the approved soil and water conservation plan as the Truth Investigation report recommends.

### **Human Perception, Activity, Behavior**

In the SDI model, human perception, activity, and behavior “include different scales ranging from individual perceptions, activities, and behaviors to community understandings, values, and collective pursuits” (Dockry et al., 2015, p. 130). In number four in the Consultation Report the tribal council has requested two additional briefing sessions be held by ACC to ensure that tribal members fully understand: land and natural



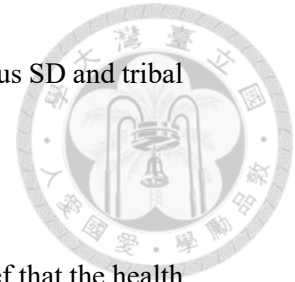
resource rights of indigenous peoples to explain the basic rights of indigenous peoples in mining law, past disputes about land historical injustice, and geological safety. The tribal council believes that only with a thorough understanding can Truku people make informed decisions regarding this case.

The way Truku peoples have responded to ACC's mining operations is related to human activities. For example, the Anti-Asia Cement Return My Land Movement is a direct example of behavior by tribal members to express their negative perception of the mining operations. This movement has been going on for more than twenty years and can be interpreted as a clear message from a portion of tribal members that mining operations in the community are not sustainable and directly interferes with future Indigenous SD. While this may not be the perspective of all tribal members, it is important to consider when looking at the way the community perceives the mine.

Another example of how ACC mining operations are perceived by the local community is the results of the vote on whether or not to allow future mining activity. In February 2022, as mentioned in Chapter 2, 64% of the local population participated in the vote, resulting in 294 votes in agreement, 45 votes in disagreement, and 14 votes that were considered invalid (Chapter 1, p. 18). The vote passed as 83% of the tribal households approved the continuation of mining operations at Xingcheng Mine. However, concerns about the way this vote was carried out have been expressed by some tribal members and these are important to consider (Chapter 1, p. 18)

Overall, the way that the Truku community perceives ACC's mining operations in their community is complicated. Furthermore, the Asia Cement case has caused a rift in the relationships of some tribal members and split families because of how individuals perceive the role that mining plays in the community. These tensions are important to

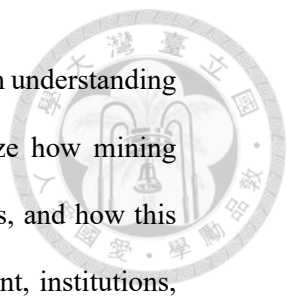
recognize in this case, particularly how they might affect future Indigenous SD and tribal futurity.



### **Autochthony**

The SDI model defines autochthony as a “cultural value and belief that the health of the land and people are one—a profound connection and relationship with the land” (Dockry et al., 2015, p. 132). One section of the Truth Investigation discusses Truku conceptualizations of land and resources. In this section, the connection between the land and the Truku peoples is explained through a Truku teaching: “Dxgal o dara, Rnaaw o sapah” meaning “the land is our blood and the forest is our home” (Truth investigation, 2022, p. 56). In this section of the Truth Investigation Report, this teaching is used to explain how tribal members are discussing and conceptualizing the future ACC’s mining operations in an Indigenous framework. This teaching also has historical significance and is inscribed on a memorial in Fushi that commemorates the Truku peoples that lost their lives in defense of their land during the Japanese colonial period. The plaque additional states: “after our ancestors migrated from TRUWAN, we always remember their teaching: co-farming and co-hunting, worship our ancestral spirits, and the protection of our forest home” (Limadjakan, 2019).

Another example of how this teaching is embedded in Truku understandings can be understood through a quote from Tian Chun-Si, the founder and leader of the Anti-Asia Cement Return our land Movement. In 2003 during a tribal council meeting about ACC’s mining operations she said: “This land is where we, Indigenous people, grew up. Without this land, it would be as if we had no life” (Pan, 2004, 12:41). This quote reveals the connection for Tian Chun-Si between her future life and wellbeing in this case is directly tied to the land. Thus, in order to continue to live, she feels that she must fight for the return or the protection of the land where ACC’s mining operations are.



If Dockry et al. (2015) consider autochthony as a key component in understanding the balance between elements, in this case, it is important to recognize how mining operations affect the connection between the land and the Truku peoples, and how this contributes to the future SD of land and sovereignty, natural environment, institutions, technology, economics, and human perception, activity, and behavior. It is important to take these factors into account when envisioning Indigenous futurity and striving for Indigenous SD.

### **ACC's Indigenous SD**

Asia Cement outlines their sustainability strategy in their 2021 sustainability report as in figure 5. This figure reveals the main strategy for implementing sustainability as a corporation is the universally recognized three pillars of sustainability: economy, environment, and society. In chapter 2, I argued that Indigenous people have critiqued this definition as narrow and incapable of encompassing “Indigenous notions of community wellbeing” such as “social, cultural, spiritual, environmental, and economic intersections that are deeply rooted in distinct and locally based traditional knowledges” (Navarrete et al., 2021, p. 15). Asia Cement using these three pillars of sustainability as a strategy for future SD in their operations is already one example of how Truku and ACC's understandings of sustainability contrast.



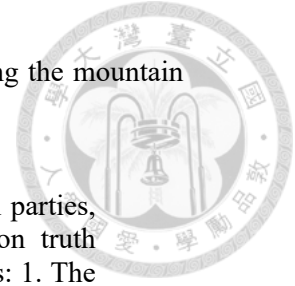
## Mission, Vision, Strategies and Sustainable Goals



Figure 5: ACC's Sustainability Strategy (Asia Cement 2021 Sustainability Report)

### Land and Sovereignty

Within ACC's sustainability report, land is mentioned several times, usually in reference to the environment (see natural environment section). Land related to sovereignty was mentioned just two times within the 132-page report (Asia Cement Corporation, 2022). ACC acknowledges that they do not have ownership of the mining area: "Since the land in the mining area was leased to Asia Cement by the government authority, Asia Cement does not have the ownership" (ibid, p. 47). Land related to the Truku sovereignty was explored three pages later in reference to the Truth Investigation



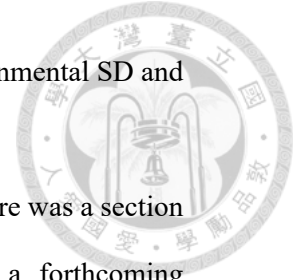
report in the section about environmental sustainability related to mining the mountain and biodiversity. ACC writes,

“Through 7 official meetings and 22 times of negotiations by all parties, on February 9, 2022, Executive Yuan published the report on truth investigation and 4 suggestions. The conclusions were as follows: 1. The lease of land by Asia Cement was not illegal. 2. Flaws were found in the administrative work of the government, the traditional convention was ignored” (ibid, p. 50).

It is clear in this quote that ACC has simplified the Truth Investigation Report down to two simple findings. This does not reflect the true findings and four recommendations of the report according to the perspective of researchers and Indigenous community members. This also contrasts with the Consultation Report number 1 (see land and sovereignty in Truku vision section). Overall, a comparison of SD strategies related to land and sovereignty of ACC and the Truku villagers reveal different priorities and future visions.

### **Natural Environment**

ACC has extensively addressed how their sustainability strategy incorporates the natural environment including people, human communities, plants, animals, rocks, water, and air in the 2021 sustainability report. They addressed a “scope of significant topics” for environmental sustainability that include: Low carbon green manufacturing process and cement 4.0, a climate strategy, energy use and conservation, raw materials, water risk, emissions, wastes, and environmental regulations (ibid, p. 17). Between pages 13-55, they explain their strategies within the manufacturing processes itself to reduce carbon emissions, build a circular economy, reduce energy and water usage, restore the environmental ecology, reduce pollution in the air, and create infrastructure to prevent flooding and rockslides in the case of typhoons and earthquakes. They also address the need for future land recovery (ibid, p. 47). The abundance of information related to the natural environment in this report reveals that ACC developed a comprehensive strategy

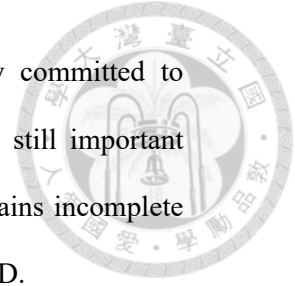


for SD in this aspect of the SDI model. However, Truku vision of environmental SD and ACC's, have some different priorities.

Firstly, while geological safety is mentioned in the report and there was a section that outlined the “mining mountain investigation report”, there is a forthcoming geological survey regarding the safety of the areas surrounding the mine that has yet to be released (ibid, p. 48). Guaranteeing the safety of residents surrounding the mine is not possible without this information. Therefore, ACC's sustainability measures regarding environmental safety are somewhat incomplete and the needs of the Truku community members for environmentally SD have yet to be met.

Secondly, although ACC mentions the need for land restoration measures after the completion of the mining to make the land available for reuse, a specific plan has yet to be developed or a timeline and agreement for the establishment of a concrete plan. Some ideas they propose include “a native botanic garden, a geographic museum, an eco-lake, an aboriginal cultural hall, or leisure facilities” (ibid, p. 47). However, they emphasize, “This mining area land re-activation plan is solely a suggested blueprint, the actual construction and use of it will be planned and designed by the government in the future” (ibid). What is troubling about this statement is that there is no mention of working tribal members for mine transformation and restoration. Nor is the return of land in any capacity mentioned. Instead, ACC has placed responsibility for decision making regarding mine restoration in the hands of the government. This does not match the vision of SD proposed by the Truth Investigation Report or the Consultation Report, (number 1, points 1 and 4 for tribal consultation). Furthermore, there is not a plan outlined for future management of the land in regards to risks such as flooding or rockslides should the mine close.





Overall, this section reveals that while ACC has extensively committed to sustainable operations in regards to the natural environment, there is still important information missing about safety and therefore SD of this element remains incomplete and doesn't match the Truku communities' vision and needs for future SD.

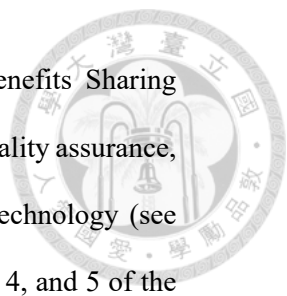
### **Institutions**

In the 'local community caring section' of the sustainability report, ACC outlined several ways that they have and continue to support Indigenous institutions. The three main points that they highlight are: feedback and participation in community activities, sponsoring the education of Indigenous students, providing or assisting with science education and traditional cultural inheritance. Many of the specific ways these points are implemented are explained in the 10+11 benefit sharing mechanism (see appendix B, particularly numbers 3 and 9 from original 10 and 2, 3, and 11 from added 11). For the most part, these measures established by the ACC match with the needs identified by the Truku Tribal Council.

### **Technology**

Within the 2021 Sustainability Report, ACC touches on sustainability mainly in reference to two categories: technological developments for more sustainable mining operations, and technological improvements for the local community surrounding the mine. Some of the technological developments regarding mining include low carbon technology for a circular economy and net-zero emissions, carbon capture technology, "Cement 4.0" process technology to incorporate AI into mining operations, vegetation restoration and advanced explosion technology (ibid, p. 16). Overall, ACC puts serious effort into SD of technology for mining operations and prioritizes technological advancements that contribute to fewer carbon emissions and less environmental impact.

The technological improvements for the local community covered in Asia Cement's sustainability report closely resemble those mentioned in numbers 17, 22, 24



and 25 of the Consultation Report (Appendix A). In the “10 +11 Benefits Sharing Mechanism”, ACC commits to electric bill subsidies, house repairs and quality assurance, school shuttle buses, repair of iron sheet houses, and water recycling technology (see Appendix B, numbers 1 and 2 of the original 10 benefits and numbers 1, 4, and 5 of the additional 11 benefits). Overall, the technological improvement and maintenance services provided in the benefit sharing mechanism closely resemble the technology needs proposed by the tribal council.

However, when looking at cultural tools and practices as a form of technology, ACC does little to ensure future SD. In the ‘Local Community Caring’ section of the report, ACC asserts that they assist in tribal cultural inheritance activities by “joining tribal meetings or associations to conduct important festival activities...” and furthermore, in the past ACC also “supported and sponsored tribal sporting events” (ibid, p. 106). ACC also says that their eco-park “is able to promote the sustainable development of local tourism, create job opportunities and help to carry on local aboriginal culture, thus, escalating energy and vitality for the tribe” although the report does not really explain how the park promotes local aboriginal culture (ibid, p. 119). The report never addresses hunting in the mining area or joint-management of the ecological landscape. Furthermore, farming or Truku cultivation technology was not mentioned except for ACC stating that they have established a priority purchase mechanism for local agricultural products (ibid, p. 105).

Overall, ACC has included some of the technological needs expressed by the tribal council, and even prioritized sustainable technology advances that were not mentioned by the tribe. However, when looking at the cultural aspects of technology, ACC has not acknowledged the way that their mining operations interfere with Truku cultivation or hunting technology. This is something that is lacking in this area of SD.



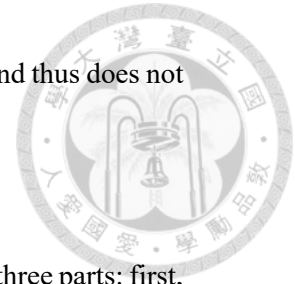
## **Economics**

ACC's SD in regards to economics primarily discusses the important role ACC plays in the regional and global economy, the high-level products produced, and the increasing demand for these products. Also included in this section is Asia Cement's emphasis on a circular economy. The main takeaway from this section appears to be a reflection of ACC's mission listed on their website, "Asia Cement believes that economic growth and environmental protection can be achieved in parallel" (Company Profile and History, 2022).

ACC also implements 'community caring' meaning they work "to assist the disadvantaged groups out of the woods, to help individuals or groups who are in need of help and to strive for elevating positive strength in the society" (Asia Cement Corporation, 2022, p. 103). Some of the ways that they implement this 'community caring' include fulfilling the "10+11" benefit sharing mechanisms and allocating expenses for social aspect at least over NT\$45,000,000 each year" (ibid). They state, "the most direct way of taking care of local indigenous friends by Asia Cement Hualien Plant is providing job opportunities to cultivate talents" (ibid, p. 106). In numbers 7 and 8 of the 11 added benefit sharing mechanisms, ACC corporation agrees to provide more internships and enhanced employment opportunities (Appendix B).

While many of the commitments that ACC has made to SD in regards to economics match the Truku tribal council's proposed conditions for consultation, the future economic development following mine closure is still relatively vague and has not been developed in tandem with tribal visions. As previously mentioned, ACC has identified a need and commitment to developing a closure plan, but states that it will be "planned and designed by the government" (ibid, p. 46). This does not ensure the future

SD of the local community's economy or prioritize Indigenous futurity, and thus does not match the proposition of the tribal council.

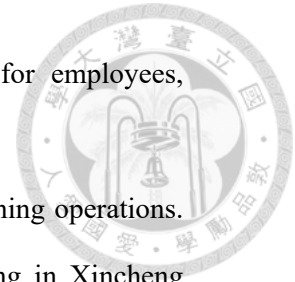


### **Human Perception, Activity, Behavior**

ACC's perception of their mining operations can be understood in three parts: first, through the vision and mission of their company, second, through how they articulate the perceptions of others, including consumers, Indigenous community members, other corporations, and the government, and finally, through the values they commit to. The company's mission and vision reflect their desired image and long-term goals. ACC defines their mission as being "the first-choice partner for building sustainable green homes" and describes their vision as "continuing to pursue high quality, high efficiency, high environmental protection, low cost and innovative products to become the role model of the cement industry" (ibid, p. 4 and 5). While the sustainability report acknowledges the relationship between ACC and society or local communities on several occasions, neither the mission nor the vision statement explicitly mentions society or communities; instead, they focus primarily on environmental concerns and economic development. Thus, ACC does not appear to prioritize their mining activities' impact on the community and society.

The way ACC depicts consumer, Truku, corporate, and government perception of their operations is mainly described through approval ratings or awards. For example, according to the sustainability report, customer satisfaction was 97%, and based on the Bsngan tribal vote, "83% of the tribal households supported the Company to continue mining in the area" (ibid, p. 2 and 78). Some of the awards and recognition ACC has received include: constituent of "Taiwan Sustainability Index" four years in a row; the highest AAA grade for its ESG evaluation in 2021, and so on. Third, ACC states in their

sustainability report that they are committed to safety and health for employees, promoting gender diversity and equality, and respecting human rights.




Overall, ACC paints a rosy picture of human perceptions of mining operations. However, human behavior and activities in response to ACC's mining in Xincheng contradict this image. As previously mentioned, these contrasts are important to recognize in this case, particularly how they might affect the future of ACC's mining operations.

### **Autochthony**

ACC's sustainability report addresses autochthony or a "profound connection and relationship with the land" in an interesting way. They state, "Asia Cement and local residents all belong to this land, [we] co-exist and co-prosper together with all indigenous people here. It is the most important thing in the mind of Asia Cement" (ibid, p. 105). Including Asia Cement in the same sentence as 'local residents' in reference to belonging to the land completely ignores the colonial history, environmental injustice, controversial land claims and historical land injustice. This version of autochthony not only greatly contrasts with Indigenous perceptions but does not match reality; ACC does not co-exist and co-prosper with all members of the tribe.

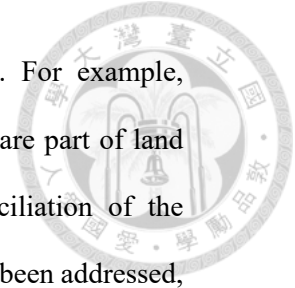
### **Comparison of Visions**

While both the Truku Tribal Council and ACC addressed all six elements of the SDI model within their versions of future sustainability, there were some key differences. Several of these key differences reveal a contrast and tension between the two stakeholders. In regards to the *land and sovereignty* category, ACC does not recognize Truku claims to sovereignty, nor do they recognize historical land injustices in their vision of land SD. In the *natural environment* category, while safety, and limiting pollution are shared values, ACC's vision of geological safety does not fully address concerns raised by the Tribal Council. Furthermore, both stakeholders had different



visions for a mine closure plan: ACC described a land restoration project supervised by the government and the tribal council and Truth Investigation report envisioned a negotiation between the tribal community and ACC that recognizes the traditional rights of indigenous peoples. While ideas of SD in regards to *institutions* are for the most part shared, the Tribal Council has also requested a compensation fee for historical land injustice that could be used for future tribal institutional development, something that ACC does not address. In the *technology* section, ACC and the Truku Tribe have similar visions for technological advances in the community, but the impact mining operations have had on Truku cultivation or hunting technology in the past and how to develop a plan for the future continuation of this Truku technology was not addressed by ACC. Regarding *economics*, ACC's SD considered the larger impact the mine had on the region and globe, while the Truku tribal members were more focused on local economic growth. Also, the vision of a mine closure plan held by Tribal members includes a "balance between economic development and the traditional rights of indigenous peoples" and therefore should also be included in the economics section, but as previously mentioned, ACC and the Tribal Council do not share the same vision for a mine closure plan. In regards to *human perception, activity, and behavior*, the way ACC describes Truku tribal members' perceptions of mining operations does not necessarily match the actual perceptions that community members have. Finally, *autochthony* for the Truku peoples can be understood in reference to Truku teachings, a concept that deeply contrasts the ACC's assertion that "Asia Cement and local residents all belong to this land" (p. 105).

Dockry et al. (2015) write in reference to the SDI model that, "sustainable development is defined as the process of maintaining balance and reconciling the tensions within and among the six dimensions of sustainability" (p. 131). Through this document analysis, I have found that within each of the six elements, tensions and imbalance already



exist, which is carried over into tensions among different elements. For example, economic development is in tension with historical land injustices that are part of land and sovereignty and human perception. Because balance and reconciliation of the tensions within and among these six dimensions of sustainability has not been addressed, according to the definition provided by Dockery et al. for the SDI model, Indigenous SD does not exist. However, this analysis completes the first step in finding a pathway towards Indigenous SD. Dockery et al. further say, “it is important to identify the relationships among different dimensions, identify the tensions, and seek solutions to relieve those tensions” (ibid). In this chapter, I have already identified several of the relationships within and among each element and identified some of the points of tension that exist between ACC and the Truku community’s vision of future sustainability. Thus, the next logical step is to find solutions to relieve the tensions and identify a possible pathway forward that balances all six elements equally.

### **Conclusion**

In this chapter, I analyzed the Bsngan Tribe’s vision of Indigenous SD as outlined in the Consultation Report, as well as ACC’s vision of Indigenous SD through the 2021 Sustainability Report and the 10+11 Benefits Sharing Mechanism. I did this by employing the SDI model for Indigenous SD, which contains six key elements that are necessary to include in pathways for Indigenous SD: land and sovereignty, natural environment, institutions, technology, economics, human perception, activity, and behavior, and autochthony. The results of this analysis revealed tension between ACC’s and the Truku Bsngan Tribe’s versions of Indigenous SD. Because balance between the elements does not exist, according to the SDI model, Indigenous SD therefore is not possible. In the next chapter, I will discuss a potential pathway towards Indigenous SD in the Asia Cement case and recommend future research methods that can make this pathway possible.







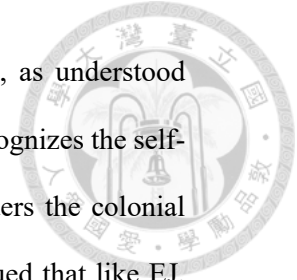
## **5: Conclusion: Pathways for Indigenous SD in the Asia Cement**

### **Case**

#### **Research Overview**

In the first chapter of this thesis, I introduced Indigenous peoples in Taiwan and identified some of the challenges these groups face today, including struggles for legal recognition and fights for the acknowledgement of historical land injustice and land back (Shih, p. xiii, 2021). From here, I outlined specific details about the Truku peoples, the Indigenous group that live in the community affected by ACCs mining operations. I then provided a specific timeline and details of the Asia Cement Case. I identified the main controversies in this case including the illegal seizure of Indigenous land by the government, the question of legal land ownership, document forgery, withholding of information, and failure to properly consult or explain legal proceedings to local people in the Truku language. I then went into details regarding Indigenous protests and lawsuits against ACC and the government, the recent vote for tribal consultation, and the approval of the renewed lease. I ended this chapter by addressing recent efforts to revise the mining law and the current status of mining operations today.

In the second chapter, I provided a literature review of publications about the Asia Cement Case. I identified research gaps and oversights, including previous researchers employing theoretical frameworks and methodology that did not include Indigenous perspectives. Next, I acknowledged the colonial tendencies of knowledge production and explained my reasoning for developing a theoretical framework of literature written by Indigenous scholars. The framework I developed identifies settler colonialism and land dispossession as an environmental injustice through the scholarship of Whyte (2016) and Gilio-Whitaker (2019). From here, I addressed a need to overcome this injustice, however, I argued that mainstream conceptualizations of EJ often work within the systems of the



State. Thus, to overcome these systems of oppression, Indigenous EJ, as understood through Gilio-Whitaker and Parsons et al. (2021)'s writing as EJ that recognizes the self-determination and nationhood of Indigenous peoples as well as considers the colonial conditions of the environmental injustice, must be applied. Next, I argued that like EJ, SD frameworks share many of the same shortcomings at EJ. These shortcomings of SD include the need to address neocolonialism and ethnocentric assumptions within sustainability, recognize diverse notions of well-being, consider place-based needs and knowledge, and challenge Western conceptions of development. I also included SDGs within this critique as they are a way of implementing SD. I ended the chapter by providing an array of alternative versions of SD proposed by Indigenous theorists: collective continuance (Whyte, 2018), radical resurgence through grounded normativity (as cited in Simpson, 2016), sustainable self-determination (Corntassel, 2008), Indigenous SD (Dockry et al. 2015), and Taiwan's Indigenous knowledge (as cited in Tansikian, 2021).

In the third chapter of this thesis, I used Gilio-Whitaker and Whyte's understanding of settler colonialism and land dispossession as environmental injustice to understand the historic conditions that led to the present-day injustice of the Asia Cement Case. I began this chapter with a brief overview of colonial periods of Spain, the Dutch, Zheng Cheng-Gong, the Qing Dynasty, the Japanese Empire, the Kuomintang Government, and the current Democratic Progressive Party. I then focused on the East Coast Indigenous tribes, specifically the Truku peoples, and identified key events and policies that led to Indigenous land dispossession and resource extraction from Indigenous lands during colonization by the Japanese, Chiang Kai-shek and KMT, and the present-day democratic government (currently the DPP). I ended this chapter by recognizing the Truku resistance to settler colonialism and the structure of environmental

injustice it creates. I argued that this resistance can be viewed as Indigenous concepts of futurity related to SD.

In the fourth chapter of this thesis, I delved into the Asia Cement Case. Having already developed the necessary background on the status of Indigenous peoples in Taiwan, the theoretical framework needed for analysis, and the historical context relevant to this case, I applied the SDI model of Indigenous SD to complete a document analysis in order to understand Truku and ACC's conceptualizations of SD for future mining operations in Fushi. I divided my analysis into the six parts of the model: Land and Sovereignty; Natural Environment; Institutions; Technology; Economics; Human Perception, Activity, Behavior; and autochthony.

For the Truku vision of Indigenous SD, I used the "The Tribes' 30 Demands for ACC for the 2021 Consultation Process" as my primary source and supplemented this source with quotes from Truku tribal members I found in the media and publications as well as details from the Truth Investigation Report. For ACC's SD vision, I used the "2021 Sustainability Report" and the "10 +11 Benefit Sharing Mechanism" as my primary sources and supplemented my findings with quotes from the Asia Cement Website or press releases.

After categorizing my findings from the documents into the six categories for Indigenous SD according to the SDI model, I compared the visions. My findings revealed some similarities in the visions, particularly related to economic or technological SD practices outlined in the "10+11 Benefit Sharing mechanism" among other examples (see Appendix B). However, my findings largely reveal that within each element, there are tensions between what members of the Truku council identify as their needs and visions for Indigenous futurity and Indigenous SD and what ACC has included in the corporate SD strategy. Thus, my findings reveal that because there is imbalance between both

within the elements and between the elements, Indigenous SD cannot be achieved in the Asia Cement case under the current conditions.



### **Next Steps**

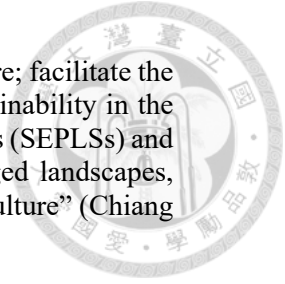
Although in Chapter four I argued that currently, Indigenous SD does not exist in the Asia Cement Case, this does not necessarily mean that it can never exist. According to Dockry et al., (2015) “it is important to identify the relationships among different dimensions, identify the tensions, and seek solutions to relieve those tensions” (p. 131). While my analysis identified the relationships and tensions between elements, I will not provide my own solutions that balance the tension between elements. That is because I firmly believe that it would be unethical for me to propose changes without extensive “interdisciplinary research and community participatory planning that incorporates traditional ecological knowledge, community perspectives, and multiple scientific disciplines” and recognize the limitations in my research methods (ibid).<sup>7</sup> In order to develop Indigenous SD for the Truku Bsgan Tribe and ACC, I recommend further research that involves extensive collaboration between researchers, members of the Truku community, and representatives from ACC. In a sense, the research team would closely resemble the Truth Investigation report team but instead of searching for an objective truth, the purpose of this research would be to develop solutions to relieve the tensions I identified in the SDI model.

In my research, I discovered a study published in 2022 titled, “Sustainable development of Taiwanese indigenous tribes in accordance with Seediq tradition of Gaya” (Chiang et al, 2022). I believe this study could be used as a potential model and example of how research towards developing Indigenous SD may be achieved in the Asia Cement Case. The objective of this study was to:

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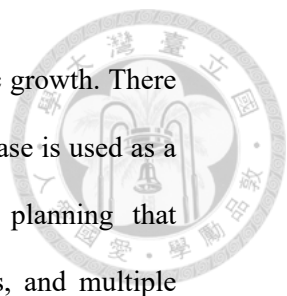
<sup>7</sup> for research limitations see page 7 and 8.

“establish a sustainable tribe that coexists harmoniously with nature; facilitate the restoration of Gaya in Seediq culture and apply its spirit of sustainability in the restoration of socioecological production landscapes and seascapes (SEPLSs) and reintegration of industries; and solve problems involving damaged landscapes, non-indigenous land use, the indigenous exodus, and the loss of culture” (Chiang et al, 2022).



The methodology and data collection in this study included: learning from village elders and rediscovering Seediq traditions, raising tribal capabilities through classes and training, restoring the traditional mechanism of consensus decision-making to increase tribal engagement and cohesion, and partnering with public departments to restore landscapes damaged by natural disasters. Furthermore, restoring traditional Seediq culture and ecological diversity, promoting friendly agricultural practices that embody tradition and coexistence with nature, establishing symbiotic tribal industry chains and assisting tribal farmers, and reviving and integrating indigenous cultural heritage with ecological restoration to develop diversified incomes. (Chiang et al, 2022). The results for this study included: restoring and converting abandoned community land into ecological, production and living landscapes, establishing a community-friendly industry system for the common good and increasing environmentally friendly planting areas, increasing agricultural income, restoring biodiversity, and increasing incomes using biodiversity (ibid).

There are striking similarities between this case and the Asia Cement Case. Both communities share a common tradition of Gaya or ancestral rules, both communities face challenges related to damaged landscapes, non-indigenous land use, and the loss of culture. In this study, in order to achieve Indigenous SD, solutions were developed from the ground up, starting with Indigenous knowledge and tradition, followed by the use of Indigenous institutions to make decisions related to the natural environment. This exercise of Indigenous sovereignty and the use of Indigenous technology related to the



land was then used to develop income and develop sustainable economic growth. There is a very clear connection between this case and the SDI model. If this case is used as a model for “interdisciplinary research and community participatory planning that incorporates traditional ecological knowledge, community perspectives, and multiple scientific disciplines” it is possible to envision a pathway forward for future Indigenous SD in the case of Asia cement and understand possible strategies for balancing the tensions between elements (Dockry et al., 2015, p. 131).

### **Beyond Taiwan: Indigenous SD on a Global Scale**

While this thesis exclusively focused on one case study in Taiwan, this study fits into a global trend of environmental injustices experienced by Indigenous communities in relation to industrial development. While globally, both in the public and private sector, SD practices are being implemented to regulate the unsustainable and oftentimes harmful actions of organizations, businesses and corporations, best practices for SD are often designed to be universally applicable. These universal frameworks are often incapable of recognizing “indigenous cultural values, concerns, world views (epistemologies and ontologies) or teachings” (Dockry et al., 2015, pg. 2). It is important that we, as a society, rethink the way that SD is implemented and instead of universal applications of SD, instead prioritize collaborative, Indigenous led development that centers Indigenous concepts or alternatives to SD. Doing so is the only way that we can address the environmental injustices that occur in Indigenous communities properly. Additionally, as Dockry et al. write in their paper, Indigenous SD methods can work beyond Indigenous communities for anyone striving to understand sustainability in a more holistic and inclusive way. Thus, I believe the findings and lessons can extend beyond Taiwan and hopefully, in the future, as a society, we can arrive at more inclusive understanding of SD

that prioritizes the rights, needs, and aspirations of Indigenous communities, while fostering a sustainable planet for generations to come.

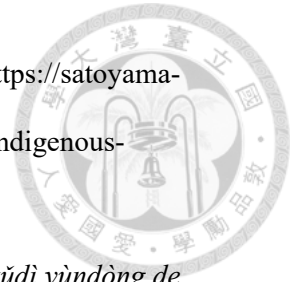




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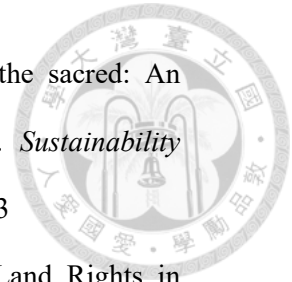
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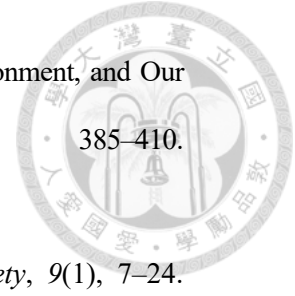
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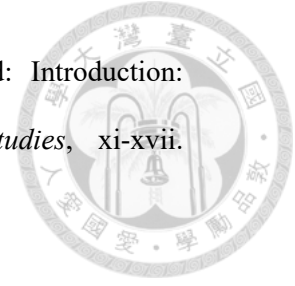
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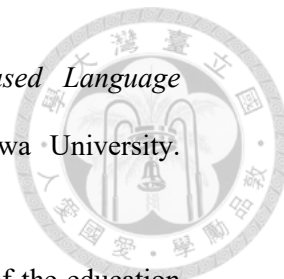
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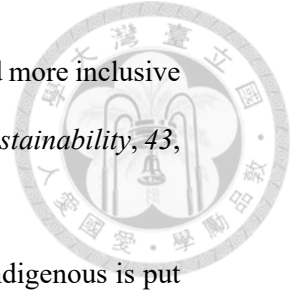


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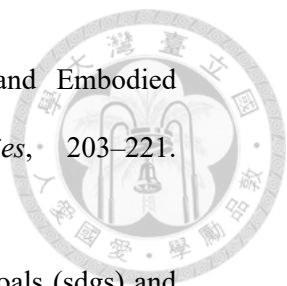


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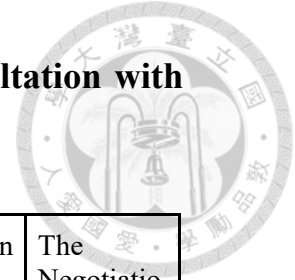




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## Appendix A: Bsngan's 30 Demands for Tribal Consultation with ACC



*Translation provided by Jenny Zhao*

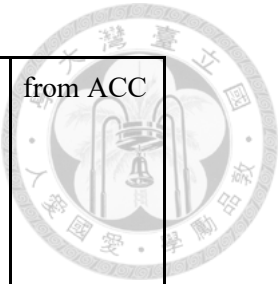
Classification	The Tribes' 30 Demands for ACC for the 2021 Consultation Process	The Negotiation Process
<p>As a prerequisite to the consultation process and voting (ACC is required to agree to these things before voting to discuss the consulting agreement vote and any other subsequent participation, management and benefit sharing mechanism)</p>	<ol style="list-style-type: none"> <li>1. Commitment to fulfill the four recommended items of the Truth Investigation Report. (To confront the injustices of past land acquisitions and the harm it caused local Indigenous Peoples, to return the land to its original owners, to face the transformation of the mine and sustainable development within the tribe together alongside the tribe, to respect tribal sovereignty and practice consultative consent as stipulated by the Indigenous Peoples Basic Law)</li> <li>2. Promise to fulfill the eight demands that resulted from the tripartite meeting.</li> <li>3. Promise to cooperate with and participate in the government supervised restoration and return of tribal land rights, Assist tribal members during relevant operations and procedures, including but not limited to: allowing tribal members to enter mining grounds to confirm their land, investigate the current use of land, actively assist administrative agencies in surveying and investigating the current land use situation, survey the land, etc. , and to assist in allocation of rent money deposited in court to the subsequent families who own the land.)</li> <li>4. The Truth Investigation Report on the historical truth of the land and the Geological Safety Investigation Report on the mining location and vicinity are key components of information in this case, and the tribal members should discuss and vote for resolutions through consultation and agreement with full freedom. ACC did not complete the procedures for free, prior, and informed consent in accordance with Article 16 of the Consultative Measures, hence ACC is required to hold two additional briefing sessions, and hold an additional briefing session for the tribal members of Xiulin Village who have leased the land. The requirements for holding two additional briefing sessions are as follows:</li> </ol>	<p>Please refer to the Appendix (II)</p>



	<p>1) Invite experts on Indigenous land and natural resource rights to explain the basic rights of Indigenous peoples in mining laws, as well as an international consultation of companies mining in Indigenous areas.</p> <p>2) Invite the truth-investigation team to publicly explain the content of the investigation and report back to the tribe again, to understand the past disputes about historical land injustices. Only when the geological safety and mining plan is guaranteed to ensure residential safety, mining area safety, and future land recovery for future generations to continue to use, can we consult and agree with full freedom and knowledge.</p> <p>3) Does the land register confirm if the land only belongs to the Bsngan tribe? How will the Bsngan tribe arrange the consultation consent process? It is suggested to add a seminar for the tribal members who own land in Xiulin Village (Bsngan tribe). There also needs to be confirmation of completion of the administrative process confirmed by the related tribes in the consultation agreement.</p> <p>5. ACC needs to provide the mining volume data and complete an annual report and financial report of the Xinchengshan mining area from 1974 to the present as stipulated by Article 21 Basis for Profit Sharing and Distribution. As well as taking initiative every year to provide an explanation to the tribe.</p>	<p>No response from ACC</p>
	<p>6. Urge geological safety experts to publish the geological survey report on residential safety as soon as possible X weeks before the consultation and consent vote.</p>	<p>No response from ACC</p>
<p>Participation and management mechanism of consultation, consent, and voting</p>	<p>7. The long-term monitoring plan, following a geological survey report, includes the continuous monitoring during and after mining operations. When the mining altitude reaches 120m, or when Asia Cement seeks a new mining area within the scope of mining rights, it needs to go through a new consultation and consent and environmental assessment procedures.</p>	<p>In the past, ACC provided seedlings for the greenification of the tribal environment, desilting before a typhoon</p>



		disaster, and cleaning up after a typhoon disaster
	8. X years before the end of mining in the mining area, ACC and the tribe shall negotiate and propose a mining transformation plan for the area, and confirm the allocation of the total amount of reserve funds.	No response from ACC
	9. ACC pays for the installation and maintenance of surveillance or monitoring systems, allowing the tribe to monitor the conditions of the mine at any time.	No response from ACC
	10. ACC assumes the safety responsibility for rockfall/slope improvement in the 10th neighborhood, and completes the processing as soon as possible.	ACC Commitment 10 The treatment of adjacent rockfall slopes will be handled in the same way as the Zhonghening Highway.
	11. The noise and dust of the conveyor belt under the mine affect the Kele Tribe. The conveyor belt should be completely covered in that area.	No response from ACC
	12. The consultation on the agreed upon time limit: The period of X years from the last end of the lease period (i.e., 2017.11.22) to evaluate the effectiveness of the implementation. Therefore, the consent period for this vote is only valid until November 22, 20XX, and the new consultation and consent procedure must be completed one year before the consent period expires. (In order to check the effects of implementation and to negotiate with each other to agree on set conditions).	No response from ACC
	13. In response to the injustice of the land history in the 1973 coordination meeting and the application for	No response



	<p>the mining lease process, ACC and the Executive Yuan should jointly provide tribal project compensation fees in accordance with the Lanyu nuclear waste compensation fund setting, as the basis for tribal sustainable development funds, and the promotion of mining areas. Indigenous Specific Area Planning and Local Creation Planning for Adjacent Tribes. It can be spread out and established in three years. The formation of the Tribal Fund Management Committee. Use the subsequent funding as the annual funds for the sustainable development of the tribe. Among the funding, X NTD needs to be appropriated from the compensation fee for the special project funds needed for new residential houses in the safer areas of Fushi Village or Xiulin Village for the miners. (Please provide the Mining Bureau with the mining volume since 1974. Also please provide the annual cement production, sales volume and revenue statement as the basis for formulating the compensation amount)</p>	<p>from ACC</p>
	<p>14. To meet the living safety needs and psychological safety concerns of the miners, put forward solutions, for example: in view of the living safety needs of the miners, the ACC was asked to assist the tribal conference in finding a safer area, planning to build safer houses and obtaining land. The use of X NTD of project funds. The tribal council first investigates how many households of the tribe living under the mine are willing to move to a safer area. If the number of households is confirmed, please ask the Indigenous Association to assist in purchasing a piece of farmland in Fushi Village or Xiulin Village (for example, one household: X-ping house and front yard + X-ping vegetable garden space, negotiated and adjusted according to the actual situation), project assistance will be provided to help new tribe members increase the safety of their homes or to be moved to a safer place. And personal management of existing houses and land will still be maintained.</p>	<p>No response from ACC</p>
	<p>15. Using the Lanyu nuclear waste case as reference, there are identifiable historical land injustices. Establish the compensation fee for historical land injustice, the benefit-sharing mechanism and residential safety management in mining area operations, and to formulate compensation and feedback methods. According to Article 21 of the</p>	<p>ACC's past response, full participation with (mining</p>

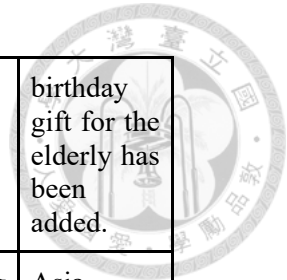


	<p>Indigenous Peoples Basic Law, ACC will directly allocate a fund of X NTD to the tribe every year to be used as a whole by the Tribal Fund Management Committee. This project fund includes two items:</p> <p>1) According to the tribal sharing mechanism in Article 21 of the Indigenous Peoples Basic Law, X NTD will be allocated for mining each year for tribal feedback.</p> <p>Within that, X NTD will be used as personnel expenses and training funds for tribal youths to participate in public affairs management. Tribal youth team takes care of tribal public affairs Services and assistance related to tribal service matters. Among them, social workers and service professionals must be included. Also, the power to write and execute the plan must be given to evaluate the effectiveness of annual implementation.</p> <p>2) In regards to the geological safety investigation and mine safety maintenance, X NTD needs to be allocated for geological safety maintenance work every year. Among this amount of money, X NTD is fixedly stored as a reserve fund after the closure of the mining site. X NTD is used as the operating fund for the inspection and safety work team in the tribe's mining area. X NTD is used as the funds for the geological safety investigation work and the cooperative geological investigation professional team, or the funds for spatial planning or visiting activities in the mining area, and the remaining funds will be used as reserve funds. Also, the tribe will set up a safety maintenance team in the mining area, responsible for the patrol of geological conditions, the teaching of operations and interpretation of geological monitoring instruments, and the regular consultation of scholars and experts. It also serves as a special window for tribes to inquire about geological safety, and explains the geological conditions to tribes. In addition, actual monitoring will be conducted with the cooperating geological survey team every year and reported back to the tribe.</p>	<p>safety, site surveys, mine greenification), Interactive understanding (service center)</p>
	<p>16. It is expected that enterprises will participate in the sustainable development of tribes and become a model, and establish a dedicated window for communication and planning between enterprises and tribes: Among the project compensation funds allocated jointly by the ACC and the government, X NTD can be converted into shares of the ACC,</p>	<p>In the past, ACC sponsored activities and events related to education,</p>

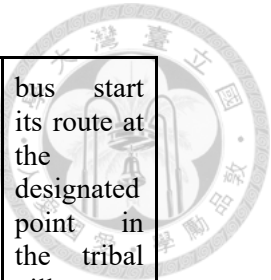


	<p>and the dividends will be used as the annual activity expenses of the tribe. In addition, a tribal meeting can be arranged to elect a tribal director who will be responsible for the coordination between the company and tribal issues. Alternatively, a position can be arranged at the vice president level to be responsible for handling the communication and negotiation between the company and the tribe or the window for plan supervision and implementation. A salary for this position of systematic operation of the communication and coordination team, consisting of several individuals recommended by the tribe, is provided for. The team regularly reviews and discusses and provides proposals for tribal issues, and provides written materials for proposals and review reports.</p>	<p>sports, churches, cultural heritage and festivals.</p>
	<p>17. Provide an electricity subsidy of X NTD per household per month, and to increase the water subsidy by X NTD per household per month. The total utility bill should be maintained at X NTD per household per month.</p>	<p>ACC's past practices</p>
	<p>18. Using Taipower's East Power Plant's and the Taroko Management's scholarship and subsidy methods as reference, scholarships should be set up and open for students from Fushi Village elementary school to university</p>	<p>ACC promises that students from elementary school to university whose grades meet a certain standard can apply.</p>
	<p>19. Provide gifts for three festivals, celebratory gifts for weddings and condolences for funerals, tribal emergency relief funds, and subsidies for vulnerable groups.</p>	<p>Emergency assistance and assistance for the disadvantaged will follow past practices of ACC, and a new</p>

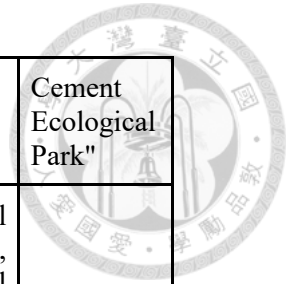




		birthday gift for the elderly has been added.
	<p>20. Create better job opportunities and improve existing labor conditions: Asia Cement Company will actively guide the local Indigenous people to obtain the relevant certificates required for mine work, in order to work as an employee for the company.</p> <ul style="list-style-type: none"> <li>• Provide X job opportunities for members of the tribe.</li> <li>• Adjust the salaries of outsourcers and employees who have tribal identity by X% every year.</li> <li>• Asia Cement Company must disclose the conditions and screening criteria for tribal outsourcers to become full-time jobs.</li> <li>• Other items, such as unimpeded promotion channels, on-the-job training, improvement of job security, etc.</li> </ul>	<p>Asia Cement promises to strengthen employment counseling : publicly announce vacancies, help tribal members fill in their resumes, and arrange appropriate positions among existing vacancies according to personal expertise, wishes and interests.</p>
	<p>21. For the university and college students from the tribe who want to participate in a work-study at ACC during winter and summer vacations, ACC will announce Plans, vacancies and quotas announced two months before holiday months, and the tribal management team will coordinate with tribal students who have expressed interest in a work-study program. There will be no number cut-off.</p>	<p>ACC promises to provide tribal college students with summer work-study opportunities.</p>
	<p>22. The public bus that transports students to school from the tribal neighborhood should have a route that goes through Neighborhood 12 to 7-11 to ACC</p>	<p>ACC promises to have a</p>



	Service Center to the Kele Tribal Village; the future goal is to provide students with a direct bus to and from school.	bus start its route at the designated point in the tribal village every day during the school semester.
	23. To cooperate with tribes to promote the "place creation" project. Use Taiwan Cement's DAKA park as reference (markets, cultural art exhibitions, and future visions) and jointly establish a local creation model suitable for the tribe with tribal members, including the use of the open space next to the butterfly garden opposite the factory for local creation.	No response from ACC
	24. To increase the number of households with house numbers/door plates and to repaired (or replace) those with iron sheets	ACC past practices
	25. To provide Neighborhood 10 with tap water recycling.	ACC promises to supply
	26. To agree to the joint management and maintenance of the ecology within ACC's mining area in accordance with the traditional domain of tribal management, and to provide the tribal with the sole responsibility of ecological maintenance and hunting management in the mining area.	ACC promises to allow for the carrying of legal hunting rifles after document verification by the mining site guards
	27. Provide gifts for kindergarten visits to ACC.	ACC promises to provide gifts for kindergarten visits to the "Asia



		Cement Ecological Park"
	28. To provide annual health check-ups for tribal members that include common cancer screenings, cardiovascular disease and physical and mental health checkups.	
	29. To provide tribal members with cleaning tools and assistance for cleaning work.	ACC has provided disinfectant for joint epidemic prevention in the past
	30. To conduct reconciliation procedures: ACC and the Indigenous People's Association will establish memorial halls in appropriate areas after the Truth Investigation Report is confirmed. Organize and display the truth investigation data, the Control Yuan's petition investigation data, and the hard work of tribal elders over the years. After the memorial hall is completed, a formal reconciliation ceremony must take place.	No response from ACC
Source: Provided by the Bsngan Tribal Conference, organized by the Citizens of the Earth Foundation (In order to maintain tribal privacy and space for negotiation, some content is replaced by X)		

## Appendix B: ACC's 10+11 Benefit Sharing Mechanism (as published in ACC's 2021 Sustainability Report)<sup>8</sup>



### Original 10 benefit sharing mechanisms

- |   |  |   |    |  |   |
|---|--|---|----|--|---|
| 1 |  | Electricity bill subsidy                            | 6  |  | Providing tree seedlings to build a green environment                                 |
| 2 |  | House repair and quality warranty                   | 7  |  | Dredging before typhoon and cleaning after typhoon                                    |
| 3 |  | After-school tutoring class                         | 8  |  | Providing disinfectant to protect from the infection of COVID-19                      |
| 4 |  | Offering emergency relief                           | 9  |  | Sponsoring the funds for education, sports, church, cultural and festival activities. |
| 5 |  | Providing Mid-Fushi Community mountain spring water | 10 |  | Fully involving in interactions for better understandings                             |



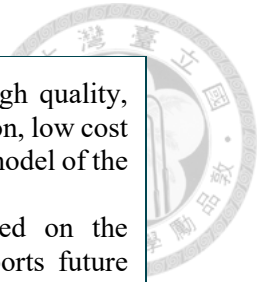
### Newly added 11 benefit sharing mechanisms

1		The same electricity bill subsidy	The same subsidy for all subsidized households. The fund estimated increasing from NT\$3,940,000/year to NT\$5,400,000/year.
2		Birthday cash gift to elderly, cash gift for weddings and giving birth, funeral money and gift certificates for 3 Chinese festivals	Birthday cash gift to elderly, cash gift for weddings and giving birth, funeral money and gift certificates for 3 Chinese festivals.
3		Scholarship for students	Giving scholarship to the qualified students, the fund estimated to be around NT\$620,000/year.
4		School shuttle bus	Planned and implemented by Asia Cement, during the school hours buses from the tribal bus station to the school. The fund estimated to be NT\$72,000/year.
5		Repair of iron sheet	Providing the repair of iron sheet houses for the ones complying with the building registration and building layout plan.
6		Adding yearly work attendance bonus	The work contracts for the administrative affairs in the Service Center, office chores and general affairs environmental work were added with the yearly work attendance bonus.
7		Providing internship to related fields and summer part time work	The works of Hualien Plant are relating to the professional areas including electrical engineering, information technology, chemical engineering, mechanical engineering, civil engineering, earth science, ecological gardening. In the future, the college students in the tribe can register for the summer part-time jobs, the ones who meet with the relevant professional areas can apply for the work through their colleges, the qualified students can be provided with the factory internship.
8		Enhancing employment counseling	Asia Cement Service Center publically offers the job opportunities of Hualien Plant and its subcontractors, tribal people can apply for the jobs by submitting a resume stating work experiences, certificates, professional areas and type of job applied, the qualified ones after the screening test will be provided with job opportunity.
9		Solving stone falling problems in neighborhood #10	The slope in the neighborhood #10 where stones were falling was located in the land used for mining, with current mining technique the top of the mountain within the land used for mining can be re-mined, the remediation of the slope can be handled by the method used in Central Corridor-Island Highway. Asia Cement applied to the governing agency the remediation plan, the construction can be started once the application is approved.
10		Recycling tap water from Up-Fushi (neighborhood #10)	The project will be executed once the land used for water tower is acquired and the agreement of the routes for connecting pipelines to each household in the neighborhood #10 is obtained.
11		Community creation: fair, cultural skills, etc.	Asia Cement Eco-park is in the process of planning the expansion and intends to provide booths for business operation which are already included in the design layout by the experts. The details will be discussed with the tribe to plan the direction of future sustainable development for the tribe.

<sup>8</sup> (For full report, please refer to this link: <https://esg.acc.com.tw/files/reports/2021%20Asia%20Cement%20Sustainability%20Report.pdf>)

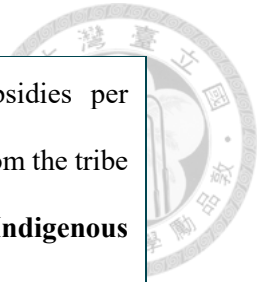
## Appendix C: Summary of Findings from Document Analysis

	<p><b>ACC’s Indigenous SD based on the SDI Model from “ACC’s 2021 Sustainability Report”, “10+11 Benefits Sharing Mechanism” and ACC Website</b></p>
<b>Land and Sovereignty</b>	<ul style="list-style-type: none"> <li>• ACC mentions land in relation to the environment, but not Truku sovereignty. ACC acknowledges not having ownership and recognizes government ownership and their lease agreement</li> </ul>
<b>Natural Environment</b>	<p>ACC provides a comprehensive strategy for sustainable operations related to the natural environment. Topics include:</p> <ul style="list-style-type: none"> <li>• low carbon green manufacturing process, energy use and conservation, raw materials, water risk, emissions, wastes, and environmental regulations.</li> <li>• Vague mention of mine transformation, putting the responsibility of planning transformation on the government</li> </ul> <p>ACC provides minimal information about residential safety, there should be a forthcoming geologic survey</p>
<b>Institutions</b>	<ul style="list-style-type: none"> <li>• ACC supports Indigenous institutions through feedback and participation in community activities, sponsoring the education of Indigenous students, and providing or assisting with science education and traditional cultural inheritance.</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>• ACC prioritizes new technologies to reduce carbon emissions, water usage, energy consumption, and promote circular economy.</li> <li>• ACC commits to electric bill subsidies, house repairs and quality assurance, school shuttle buses, repair of iron sheet houses, and water recycling technology</li> </ul>
<b>Economics</b>	<ul style="list-style-type: none"> <li>• ACC plans to balance economic growth with environmental sustainability</li> <li>• ACC has ‘community caring’ measures: promoting local economic development by supporting local businesses and providing employment opportunities for the local community</li> <li>• ACC agrees to provide more internships and enhanced employment opportunities</li> </ul>



<p><b>Human Perception, activity, behavior</b></p>	<ul style="list-style-type: none"> <li>• ACC’s mission is "continuing to pursue high quality, high efficiency, high environmental protection, low cost and innovative products to become the role model of the cement industry"</li> <li>• customer satisfaction was 97%, and based on the Bsngan tribal vote, 83% of the tribe supports future mining</li> <li>• ACC has received multiple awards for Sustainability</li> <li>• ACC is committed to safety and health for employees, promoting gender diversity and equality, and respecting human rights.</li> </ul>
<p><b>Autochthony</b></p>	<ul style="list-style-type: none"> <li>• “Asia Cement and local residents all belong to this land, [we] co-exist and co-prosper together with all indigenous people here. It is the most important thing in the mind of Asia Cement” (Asia Cement Sustainability Report, p. 105).</li> </ul>

	<p><b>Bsngan’s vision of Indigenous SD based on the SDI Model from “The Tribes’ 30 Demands for ACC for the 2021 Consultation Process”, “Truth Investigation Report”</b> Quotes from tribal members in the media</p>
<p><b>Land and Sovereignty</b></p>	<ul style="list-style-type: none"> <li>• The ability to assert sovereign control over territory and manage the land according ancestral teachings of Gaya</li> <li>• Face past land injustice needs, initiate land return, respect Indigenous sovereignty</li> </ul>
<p><b>Natural Environment</b></p>	<ul style="list-style-type: none"> <li>• ACC to ensure safety and well-being, specifically addressing air pollution, dust in the air, and crushed stones falling as a result of mining both now and in the future</li> <li>• ACC to address how mining has restricted the original cultivation of the land</li> </ul>
<p><b>Institutions</b></p>	<ul style="list-style-type: none"> <li>• ACC to provide funding for tribal youth to attend schools through scholarships</li> <li>• ACC to distinguish a compensation fee for land historical injustice</li> <li>• ACC to allocate funds for tribal feedback mechanism and tribal youth participation in public affairs management</li> </ul>



<p><b>Technology</b></p>	<ul style="list-style-type: none"> <li>• ACC to provide electric and water subsidies per household per month</li> <li>• ACC to establish a transportation system from the tribe to the service center</li> </ul> <p><b>ACC to address Interference with Truku Indigenous Technology in regards to:</b></p> <ul style="list-style-type: none"> <li>• Cultivation of land</li> <li>• Hunting and ecological maintenance: Truku people have proposed to have the ability to manage hunting and ecological maintenance according to their own technologies.</li> </ul>
<p><b>Economics</b></p>	<ul style="list-style-type: none"> <li>• ACC to Guarantee job opportunities, better working conditions, summer work-study opportunities for tribal students</li> <li>• ACC to help develop a mine transformation and land reuse plan co-designed by tribal members</li> <li>• ACC to contribute to a fund for the community that creates a balance between economic development and the traditional rights of Indigenous peoples.</li> </ul>
<p><b>Human Perception, activity, behavior</b></p>	<ul style="list-style-type: none"> <li>• ACC to provide two additional briefing sessions by ACC to ensure that tribal members fully understand land and natural resource rights</li> </ul> <p><b>Perceptions of the Mining:</b></p> <ul style="list-style-type: none"> <li>• Division between those for and against future mining</li> </ul>
<p><b>Autochthony</b></p>	<ul style="list-style-type: none"> <li>• Truku teaching "Dxgal o dara, Rnaaw o sapah," "the land is our blood and the forest is our home"</li> </ul>