The Case of the Kaliwa Dam Project in Quezon Province, Philippines: Curbing Contentions Through Active Deliberation Among Indigenous and Marginalized Communities

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Abstract

The consensus on what a city must be was embodied in The City We Need: Principles for a New Urban Paradigm, which the World Urban Campaign partners envisioned to strive for a more sustainable future. The first paradigm argues that "the city we need is socially inclusive and engaging." However, this was not always the case, especially in constructing the Kaliwa Dam. Despite the objective of providing a long-term solution for NCR's water shortage, the construction of Kaliwa Dam in Quezon Province, Philippines—through China's Official Development Assistance (ODA), allotted 18.7 billion pesos administered through the China Energy Engineering Corporation (CEEC) — has been shrouded with controversies. This includes violating legal processes, complete disregard for biodiversity issues, the human consequences and neglect of indigent rights, the technocratic criticisms of the geographic danger it poses, and the incurred debt insinuated in related cases of China's loan trap. Through document research and secondary data analysis of persisting discourses on the subject, this paper tries to expound these issues and correspond them with the necessity for multi-stakeholder cooperation. It also aims to explore viable solutions to aid the water scarcity problem while limiting the degradation effects incurred to the social dynamics and environment. Further, the analysis abides by the ongoing opposition and struggle of indigenous communities to halt the ongoing Kaliwa Dam construction—clinging to the necessity to push for the theoretical framework of deliberative policy analysis in solving the potent issues of indigenous marginalization in policy formulation processes.

Keywords Kaliwa Dam, Biodiversity, Water Shortage, Indigenous Struggle, Multistakeholder Cooperation

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1. Introduction

There has always been resistance to building large dams in contention, especially in the struggle of indigenous and marginalized communities, as facilitated by inadequate coordination among the main stakeholders. They shall be gravely affected by these huge-scale projects (Fisher, 2010). This has been the worldwide struggle of global ethnic groups. As a response, these diverse groups have sought international support, building alliances to acquire information, craft relevant solutions, resources, and political leverage to aid their plight, allowing them to raise, not just the conditions they demand—to remove what was imposed as comprehensive technological innovation referred to as dams which are infiltrating the indigenous people's ancestral domains—but also global acknowledgment for their rights as indigenous groups. Building these large dams has always raised significant debates, for it touches the economy, society, morality, and environmental security implied by these build-ups (Athayde, 2014, p. 80). A few of the arguments revolve around using large dams as a critical proponent for storing water, having a total grasp on the flow of rivers and waterways, and producing sufficient electricity to aid the needed power in urban communities. Much more controversial underpinnings involve the symbolism of large dams for nationalistic pride, implying technological progress and the capability to finally gain control of the maximum utilization of nature (Mayuga, 2020). Nevertheless, that was how large corporations who usually initiate the construction of these large dams and their supporters who benefit primarily from the project perceive it. It did not consider subtle implications like political corruption and social inequity that undermine large dam construction. The way it is seen in a positivistic light does not answer the echoes of philosophy, politics, and the moral debates concerning technological innovation and development implications (Maher, 2019, pp. 63-74). According to Fisher (2010), the focal basis of any analysis is anchored in the fundamental contentions that deviate, especially on world views that are reflective of the sets of assumptions about the "common good," "the good life," and even the human relationships, especially with nature, and that equates to rigorous analysis to any attempts to development—along with its cost and the methods to be used. The perception of an individual enclosed in an area debated is highly dependent on his environment, such that rivers may be seen as a living deity as their environment provides the necessities for living.

According to the International Commission on Large Dams (ICOLD), governmental projects have been spending 20 billion dollars annually to reshape the globe's rivers, allowing them to construct 40 0000 large dams. China has always been the most prominent dam builder, which has made 19 000 dams since 1949 (Fisher, 2010). They have been in constant aid for countries who wish to construct large-scale development, one of which is Laos. With the building of large dams and hydropower in the Mekong river, their financial crisis has further

loomed as their country's debt has downgraded from "stable" to "negative" (Jiang, 2022). According to the report of Macan-Markar (2020), the negative economic impact can be attributed to the coronavirus shock and the Ukraine crisis, which doomed the financial market and caused risks associated with buffers of low foreign exchange and external debt maturities. However, another deeper reason is the plunging of Laos into debt due to the large-scale infrastructure projects, which have undertaken about 813 projects, which totaled $16 billion. This has severe implications as the Philippines has been navigating the same path with the building of Kaliwa Dam, the New Centennial Water Source, and one of the most anticipated projects under the Build, Build, Build (BBB) program initiated by President Rodrigo Duterte (La Vina, 2019; Clemente, 2022). Other controversies have also shrouded the project, including the endangerment of the environment and indigenous communities and the political maneuverings that might have ushered in the implementation of the project (Camba et al., 2021). These motivations that do not originate from a deliberated standpoint are a bane for any community that aspires to mutual agreements and legitimacy. Without the deliberative process, it will result in outright marginalization, which takes the forms of categorical exclusions: including racism, untouchability, rendering invisibility to subalterns, delegitimizing claims, and creation of a general environment that does not only silence and marginalize voices but systematically disparages them (Heller & Rao, 2015). This has been evident in the cases of indigenous communities all around the world who share the same plight when there are dam development projects, such as Malaysia in the case of Sungai Selangor, Babagon, Batang Ai, and Bakun dams (Aiken & Leigh, 2015), Odisha, India in Upper Indravati Hydroelectric Project (Behera, 2013), the Sardar Sarovar Dam Construction (Dwivedi, 2002), and many others. Hence, the largescale impact of these projects is not an atypical concept in the academia of indigenous plights and struggles.

This paper argues that the most viable option is to postpone its construction and develop strategies to mend the water scarcity problem (Mallari & Reyes, 2022) while not undermining the rights of the involved stakeholder to participate in large-scale developments such as the Kaliwa Dam Project. It also concurs with the mechanisms implied by the deliberative policy framework, which discusses the necessity for a public space that allows facile dialogues with no constricting barriers and the ability to acquire a sense of decisiveness empowered by corroborated ideas and consensus. Hence, the study is essential in delving into the conflicting and prevailing notions of dam construction, including the ethical considerations when building dams with their deadly impact on the landscape and riverways; it tackles the indigenous displacement which has always been contested in dam construction discourses like the way that China's Three Gorges Dam has caused social turbulence with the relocation of 4,000,000 residents resulting to tearing apart of communities and displacement of natives (Yang,

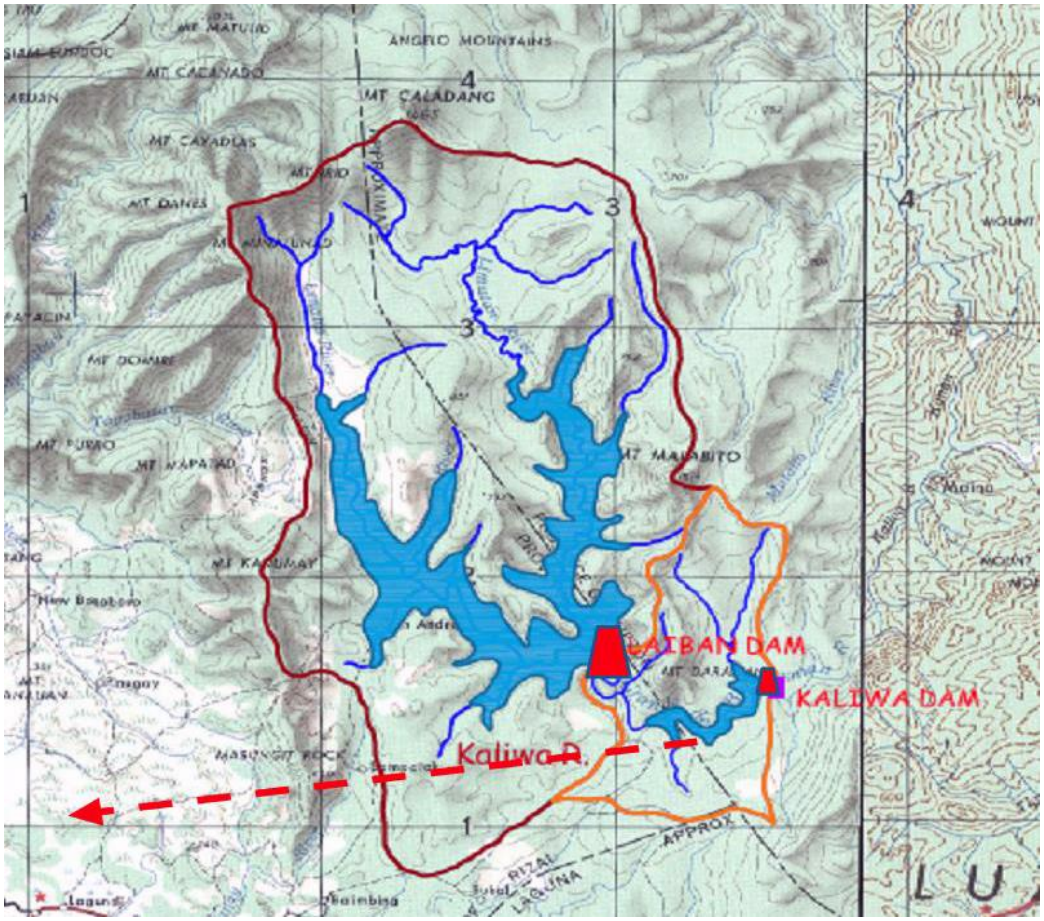
2007); it discusses an alternative to the Kaliwa Dam construction; and lastly provides an approach of multi-stakeholder participation which anchors itself from the case, especially on critical issues that affect and concerns different state agencies. Doing so provides an in-depth analysis and elaboration for Philippine policymakers to navigate the future direction of development projects and aid aspiring scholars who focus on the same issues while supplementing the probable solutions that may be delved through in similar cases of indigent contestations. While other literature and studies have discussed the negative implications of dam construction, only a few have compiled the predominant notions and narratives of the specific case of Kaliwa Dam in Quezon Province, Philippines. This paper will then elaborate on the case while pushing for a deliberative framework in mediating consensus, providing the most viable response, and the challenges that may occur in the deliberative process.

2. The Background: Shredding off The Kaliwa Dam Project

It is without a doubt that the Philippines was not merely facing the challenge posed by the Coronavirus Disease 2019 (COVID-19) as the number of cases continues to increase, demanding an immediate solution from the government rapidly—it also faces the weakening of the peso value and many economic and political predicaments. Nevertheless, among the most urgent is the one which concerns the people from the National Capital Region (NCR), which is the insufficiency of water resources, as it plunges below the safety level and has become a constant threat to urban communities, specifically the 12 million residents of NCR. The dry season has also posed some geographically set problems for the archipelago. It has been exacerbated by the worsening climate change, which contributed mainly to the country's water shortage. In 2018, the East Zone Concession in Metro Manila anticipated the supposed water shortage of the decade, as implied by the critical plummeting of the Angat Dam and the slow depletion of the La Mesa Dam, which supplies most of the water in Metro Manila (Mayuga, 2020). The Manila Water Co. Inc has largely augmented the supply of water from Angat Dam due to the escalated need for water supply as the country experiences a scorching climate, a growing population induced by the increasing number of people who will consume water, and the larger area of coverage of the water system with the consumption increasing from the usual two thousand-four hundred million liters per day (MLD). According to Mayuga (2020), the dam is only among the various projects in line with the Water Security Plan for 2018-2023, which was pursued by the Metropolitan Waterworks and Sewerage System (MWSS). The primary goal of the Kaliwa Dam is to empower the water source and provide maximum utility to Angat Dam, which will prevent the occurring water shortage problem. With the straining of the La-Mesa, Ipo, and Angat water systems, the Kaliwa Dam should be able to alleviate the problem and

will be the solution to securing water resources during hot climate conditions brought by El Niño.

Figure 1: The Map of Kaliwa Dam from Metropolitan Works and Sewerage System



Source: Bajo (2021)

Through China's Official Development Assistance (ODA), the Kaliwa Dam project was funded directly by the Chinese government, allotting 18.7 billion pesos administered by the China Energy Engineering Corporation (CEEC). The structure is 60 meters high and would be constructed in the Quezon Province's Barangay Magsaysay and Infanta municipality and Barangay Pagsangahan, General Nakar municipality. Some essential structures which will aid the new water system will be built, such as a 27.7 kilometers raw water conveyance tunnel designed to direct to other water treatment facilities. The Kaliwa Dam Project is an infrastructural boom brought by the Chinese Belt and Road Initiative and incorporated into the Duterte regime's development plan, Ambisyon Natin 2040

(See & See, 2022). If the project continues, the benefit that the government has constantly assured is the approximate capacity of raw water that the dam could hold. They guaranteed a collection of 600 million liters per day while maximizing 2,400 million liters per day, and this will ease the pressure on Angat dam while supplementing the needed raw water of urban communities, including towns of Cavite and Rizal and Metro Manila, which takes up 97 percent of consumed water (Garcia, 2019). However, despite the benefits, the dam construction continually assures indigenous and environmental communities have been opposing and calling for revoking the New Centennial Water Source-Kaliwa Dam project.

The Kaliwa Dam Project's administrator, Emmanuel B. Salamat, stated that despite the opposition's concern, they would take precautions against the disasters and minimize the environmental impact before the construction and the actual building of the conveyance tunnel and dam. He indicated that he thoroughly recognized the effect it could bring to the residents and the indigenous community of Sierra Madre's mountain range, as these lands are sources of subsistence and food for the IP communities. He also reassured that they would not be excluded from the integrated community development plan as they will relocate the affected communities, who will receive sufficient compensation (Miraflor, 2022). However, if these assurances are adequate, why do some environmental activists, non-governmental organizations, indigenous communities directly affected by this development, and experts on geological hazards oppose the idea of the Kaliwa Dam's construction despite the promise of collaboration and water security? The following sections thoroughly discuss these contentions.

Contentions on Violation of Legal Processes in Issuance of Environmental Compliance Certificate (ECC)

Large projects are usually ushered by political maneuverings (Fisher, 2010), and the Kaliwa Dam project, expected to utilize a large sum of money, was not much of an exemption. A few months after the government announced the solution for NCR's shortage of water, the Department of Environment and Natural Resources (DENR), through the Environmental Management Bureau, has already released an Environmental Compliance Certificate (ECC), and this is despite the disagreement that it raised for the indigenous people who live in the area, as well as the objection of environmentalist and advocates. This clearly violates the Local Government Code of 1991, where the government must have prior consultation on the subject. La Vina (2019) invoked Lina Jr vs. Paño (G.R. No. 129093, August 30, 2001), where the Court further clarified that any projects must have prior consultation with the main stakeholders on any developmental ventures that: 1) tends to incur pollution, 2) may bring climatic change, 3) may induce depletion of non-renewal sources, 4) has a degrading effect on the forest covers, range-land, and croplands, 5) may endanger and cause the eradication of plant or animal

species in this planet, and lastly, 6) may cause the eviction of a specific group of people where the developmental project or program is implemented. Further, the Local Government Code has said that having a public hearing is a necessity unless they are first-handed recognized by the Environmental Management Bureau (EMB). It was also indicated that such procedures should be made earlier so that specific issues will be put on the table and be deliberated. Nevertheless, none of these initiatives were carried out, resulting in the absence of subsequent resolution and endorsement by the concerned local government unit (La Vina, 2019).

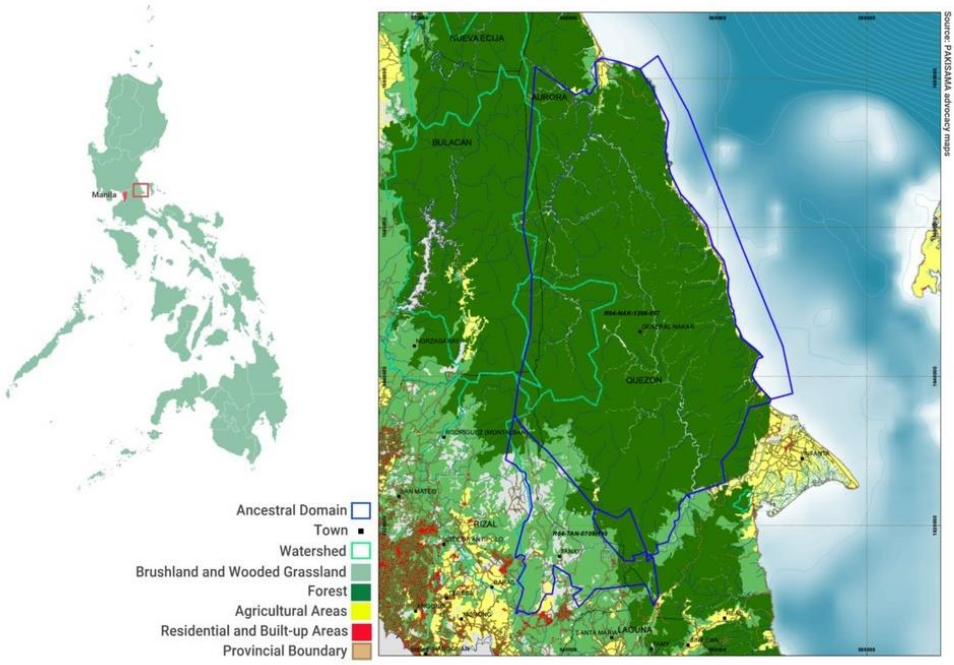
In response, the project has failed to provide the requirement entailed by NCIP AO No. 03, Series of 2012, a Free Prior and Informed Consent (FPIC), to start the project's construction. There were also allegations from Metropolitan Waterworks and Sewerage System (MWSS), along with the National Commission on Indigenous Peoples (NCIP), that local officials manipulated and railroaded the entire legal process. The Haribon Foundation (2019), in their analysis, has asserted that despite the existence of the Indigenous Peoples' Rights Act that protects the rights of the indigenous communities and provides them with the processes of Free, Prior, and Informed Consent, it is still insufficient in this case as several indigenous communities, specifically those in General Nakar and Tanay will have to leave their ancestral domain which is also the source of their sustenance and livelihood.

It can be discerned that the Department of Natural Resources, which has jurisdiction over environmental-related issues, that the project has completely disregarded the necessity for full compliance and the consultation procedures which should be issued from the local communities that will be susceptible to the construction of Kaliwa Dam. The non-observance to the rules where there must be an assembly for the concerned communities and a supposed period of consensus building where the indigenous people could push through their demands was not conducted. This made them unable to discern the merits and demerits of the proposals. Furthermore, they continually assert that they have already performed the initiatives of coordinating with people and are still doing so with the concerned parties to ensure smoother construction operations. Meanwhile, MWSS, along with the Department of Public Works and Highways (DPWH), received criticisms, and among those was the building of road access towards the dam's location. It breached the law without a permit secured from the Protected Area Management Board (PAMB) or the local government of Infanta overseeing the area covered by the road. Rovik Santiago Obanil, one of the leaders of the opposing NGO—the Stop Kaliwa Dam Network, affirmed that the road project had not acquired permission from the indigents in the approval of ECC, which should have been required by FPIC and by law (Conde, 2019).

Disagreements Concerning Complete Disregard for Biodiversity Issues

The social, ecological, and environmental consequences are extensive in building large dams (Fisher, 2010). The construction of the Kaliwa Dam will significantly damage the Sierra Madre's biodiversity. According to La Vina (2019), the area that will be covered in the dam construction is considered a protected area which means that its creation will negatively affect the ecosystem, especially the vast portion of Kaliwa Watershed. This land ridge is deemed a national park, forest reserve, and wildlife sanctuary. Therefore, an initiative as significant as building large dams has violated the National Integrated Protected Areas System (NIPAS) Act and the Expanded NIPAS Act. The figure below shows the socio-environmental map of the construction of Kaliwa Dam, where the domain of its impact is identified following the overall structure of the terrain.

Figure 2: The Socio-Environmental Mapping of the Construction of Kaliwa Dam



Source: Chavez (2023)

The Haribon Foundation (2019) has elaborated on the variety of endangered wildlife, including the critically endangered Philippine eagle (Pithecophaga jefferyi), the Philippine warty pig (Sus philippensis), the vulnerable Northern rufous hornbill (Buceros hydrocorax), the Philippine brown deer (Rusa marianna), and the endangered Northern Philippine hawk-eagle (Nisaetus philippensis). The wildlife also comprises the Luzon Endemic Bird Area's restricted-range birds, which cannot be found anywhere else. Further, it has clearly been stated in the Presidential Proclamation 1636 (series of 1977) that the Kaliwa Watershed—including its coastline and forests—is a habitat of 60 reptile species, 963 invertebrate species, 81 mammal species, 15 amphibian species, 1476 fish species, 60 reptile species, and lastly, 334 bird species. Hence, the condition implied by the Environmental Compliance Certificate (ECC) does not truly consider the large-scale effect the project could pose on the abundance of Sierra Madre's biodiversity. A context from the said certificate has stated that for the construction to persist, they must:

> *"…conduct and submit the precise inventory and assessment of threatened species that may be affected during clearing operations including maps showing the project location relative to the protected area boundaries and management zones, location of observed threatened species; land cover map indicating the various habitat types and location of management zones relative to the area for vegetation before the conduct of the Detailed Engineering Design (DED)."* (Fulgar, 2021; La vina, 2019)

Figure 3: An Image of the Philippine Eagle (Pithecophaga jefferyi)

Source: Simon (n.d.)

Regardless, the list will not do anything nor change the fact that it destroys significant habitats of countless animals if no move such as rehabilitation is considered by the authority (Talamayan, 2020). Even the resettlement of these animals further endangers the species. Moreover, it will kill the livelihood of the indigenous people who largely depend on farming and tourism through guiding hikers in the Sierra Madre mountains. The resident ethnic groups also considered this wide area a sacred site and ancestral burial ground. According to Salamat, they have considered all the possible environmental problems arising from dam construction. However, the MWSS's assessment of the building of Kaliwa Dam, which they forwarded to the DENR-EMB, tells a different story. The activities before the construction do not just modify the current landscape; they can also deteriorate the water quality leading to worsened health and sanitation problems. The critical component of constructing large projects is mobility and utilization of specialized equipment that incurs noise to the vast biodiversity, disturbing the rich biodiversity in the area. According to Mayuga (2020), the pre-construction phase is deadly to the wildlife species as it will immediately cause a disturbance, displacement, and tremendous damage to the wildlife habitat. There's also the expected effect it could bring to the land submergence of Barangay Daraitan's

springs and caves—tourist destinations for aspiring hikers. As the dam operates, there will be a considerable disruption to marine life and the threat to the proliferation of invasive species since the dam's presence allows changes in the migration pattern of aquatic species. Hence, these unforeseen mechanisms in the wildlife remained unrecognized. If it persists, there would be potential conflicts in water use, food source insufficiency, and navigational access problems in the Barangay Daraitan to Sitio Quebobosa, implying that it will widely affect the nearby residents.

Human Consequences and the Case of Sardar Sarovar Dam Construction

There are also dramatic consequences imposed by building large dams to generate hydropower, aside from ecological ones (Hite, 2022). It tends to be accompanied by displacement and destabilization of communities as the resettlement of indigenous communities is made to construct large water reservoirs. According to Fisher (2010), there is empirical evidence showing that impoverishment and social disruption are not minor risks: these have been the reality for most people involuntarily displaced by development. These pertain to an anticipated reality; the growth some see as advantageous comes with the cost of impoverishing others. The construction of the Kaliwa Dam will indisputably displace numerous people. This has been the case of the oustees of India, where immigrants of development projects resulted in political invisibility as they were forced to integrate with the poor and landless urban communities. In the broader picture, an estimated dam-related displacement amounted to fifty to sixty million people in the past five decades. The World Bank's study affirms that the worldwide displacement due to development programs in the current decade tends to be more than the tabulated displacement data during war or natural disasters (Fisher, 2010). This has been exacerbated in the advent of the pandemic, where the IP communities are most vulnerable; hence, their struggle to pursue needed resources or protections is aggravated (Smith-Morris, 2022).

India's case is a perfect example to derive a clear image of the social consequence that it implies. Along with China, they built numerous dams, displacing 20 million people in merely four decades. Among those was the Adivasis, which comprises 40 percent of the displaced individuals. Surprisingly enough, they constitute an estimated 6 percent of the Indian population. The likelihood of displacement of these indigenous populations in the construction of Sardar Sarovar Dam foretells that the one most susceptible to government projects involving relocation all around the world tends to be the marginalized sector, which is the most vulnerable, and in the Philippine case, indigenous communities (Dwivedi, 2002). The purpose of the construction of these development projects focuses on the interest of a more visible political citizenry who utilizes more resources and resides among the urban population; thus, about proceeding on

appropriation that benefits them most, and what best way to do this is to acquire resources from rural populations, which utilizes lesser resources.

Meanwhile, the justification of how the dam is often seen as a necessity for a transcending world towards modernity was highlighted by Vidyut Joshi, who has been amongst the pursuer of India's Sardar Sarovar dam construction:

> *"We have welcomed change in progress, development, and modernization. This being so, why should we object when tribal culture changes? A culture based on lower levels of technology and quality of life is bound to give way to a culture with superior technology and higher quality of life. This is development. What has happened to us is bound to happen to them because we are part of the same society."* (Fisher, 2019)

As these provide some irrefutable reasonings, we cannot deny how the notion of this sense of progress has been enumerated by various studies regarding its adverse effects where displacement endangers the communities of indigenous groups. In a societal context, it also can disrupt the means through which established interpersonal ties carry out social interactions, which is induced by spreading out the kinship networks of these alienated communities. The short-term effect may physically be plausible, but in the long term, this disruption implies widespread anomie, loss of security, and dismantling of cultural identity with the integration with the slums of urban communities and joining the migrant forces. Fisher (2019) made a significant statement saying that the indigenous groups are considered a vulnerable sector, with their remote residences that tend to be far from assimilative cultural influences. Hence, dislocations' economic and psychological disruptions are difficult for indigenous people. Displacing them also severs their strong cultural and spiritual ties to their ancestral domains and threatens the communal bonds and practices that hold their societies together. Thus, it revokes Vidyut Joshi defined the way to progress. Suppose progress is to benefit only the dominant element of society for the sake of compromising the marginalized. In that case, it was not progressing but an attempt to justify tyranny, discrimination, and state aggression incurred to the vulnerable sectors of society. The case of India's Sardar Sarovar Dam construction is very significant in the Kaliwa Dam construction as both contexts face a myriad of economic, social, and environmental impacts from their inception, which is also met with strong opposition by both scholars, activist groups, and the indigenous communities per se (Morse & Berger, 1992).

The Incurred Disaster Risk Hazards

Few of those who strongly oppose the construction of the dam have their argument grounded in the concern that the project will be situated in a location where it is near two of the Philippines' active faults, namely the Valley Fault System and the Philippine Fault Zone. It can be cited how relevant studies on seismology, such as the Japan International Cooperation Agency (JICA) and Iuchi & Esnard (2008), have indicated that the Kaliwa Dam constructions shall cover the Philippine Fault where there have been records of many large earthquakes and seismic activities in the past… specifically a six-centimeter relative movement observable in 1991 to 1993. They concluded that the Philippine Fault Zone is an area with high seismic activities, and this is evident in the catastrophe last July 18, 1880, when a massive earthquake in this zone devastated the Manila Cathedral as well as the churches of Mauban, Infanta, and other nearby establishments in Quezon Province. So, if a large earthquake happens in the future and has the potential to destroy the dam, the risk of heavy flooding will compromise the safety of around 100,000 individual lives (La Vina, 2019).

Aside from the geographic danger, there is also the notion of worsened flooding, especially in the aftermath of Typhoon Ulysses. According to the Center for Energy, Ecology, and Development (CEED) Executive Director Gerry Arances, the typhoon has brought tremendous casualties to the country. However, it might have been exacerbated if no protective barrier from the Sierra Madre had mitigated the impact. A portion of this mountain range will be destroyed once the Dam project commences its operations. The CEED also advocates for ecological integrity and energy democracy, so they also raise narratives concerning the issues of quarrying, mining, and logging in the watersheds and forests in Sierra Madre (Miraflor, 2022).

On Top of Ballooning Debts

From the government perspective, the BRI-funded dam construction projects will generate self-sustaining loan payments due to the enormous internal demands (Chirathivat et al., 2022). However, the same notion has been taken by Laos, resulting in a debt burden due to large dam build-ups to solve the energy and water shortage problem. The finance will come straight from China's ODA through the China Export-Import Bank (CEIB), another critical component of their loan trap. Nonetheless, these infrastructure financing activities reflect broader power relationships as forms of geoeconomic statecraft where countries do not wish for leverage of host countries. However, an uneven distribution benefits only a particular social group (Wijaya, 2022), like on China's BIR project in Malaysia, Indonesia, Philippines, and Singapore (Wang & Fu, 2022). This was one of Obanil's arguments stating that we would only incur an enormous loan that would not be necessary. The Philippines already have ballooning debt for building

other infrastructures proposed by the Build, Build, Build Program, which is anticipated to reach Php 8 trillion in 2021, equating to a 33.33 percent raise since 2016—the start of President Duterte's administration. This is important to note, mainly as we correspond with the Laos case, where infrastructure lending from Chinese financial institutions has put the country in danger of a vicious debt cycle (Barney & Souksakoun, 2020).

3. Potential Alternatives and Viable Solutions

The alternatives for constructing any technologically innovative project must first be in line with considering the underlying social factors for it to be viable. This has always been an essential component in the case of dam planning (Fisher, 2010). This reflects the case of Gland, Switzerland, where forty representatives met, including those involved in dam construction, the assumed affected indigency, the concerned non-government organizations, and the experts in April 2019. Through active engagement of the key proponents in the project's construction, issues are raised, and it yielded greater predictability for the probable outcome and efficiency of the actual construction. All around the globe, this integration of consensus-building before the construction of any project has always been considered. The organizations such as the World Conservation Union and the World Bank—with a mandate to assess energy development and water resources and review each development effectiveness of dams in response to internationally-accepted guidelines, criteria, and standards in the decision-making in the construction, planning, designing, decommissioning, and monitoring of dams—have always raised why multi-stakeholder participation is crucial (World Commission on Dams, 2022). The case of the Kaliwa Dam lacks the preceding of this process (Mayuga, 2020). Hence, it is only probable that any construction attempt should be halted to allow the residents and indigenous communities to assert their opinions and demand before the actual implementation of the project.

Japanese Firm's Offer of Weir Construction

One of the alternatives that could be considered is the proposal of a firm from Japan to build a weir that will provide water systems for the shortage problem. A weir, commonly called a low-head dam, is a build-up that aims to change a river's height level through the barrier covering a river's width, altering water flow characteristics. Weir is less destructive to the environment, and a mere 7-meter-high wall was proposed, which is not as large as China's 60-meter-high dam. As said by Toshikazu Nomura in a press conference of Osaka-based Global Utility Development Corp. Ltd. (GUDC), the proposed dam will only cost USD 410 million and, on top of that, utilizes a much more sustainable and long-term approach. It is expected to have a capacity worth 550 million L/day. Hence not only is it more feasible, but this alternative is also cost-efficient and is adequate to

curb the looming water scarcity problem. Nomura also emphasized that they would prioritize compliance with MWSS and utmost consideration of livelihood and communities in the area (Raymundo, 2019). Despite the renewal of the weir proposal in March 2019—since this was already presented in 2009—the government still chose the Kaliwa Dam, which remained controversial on the costly construction and the disregard for environmental and socio-cultural consequences. With the inability to provide a concrete solution to the procedural and substantial concerns, the project's construction should not be granted. Still, it continues to persist as it is continually persecuted based on illegality and immorality, for it does not merely violate the rights of indigenous people. It destroys the habitat of millions of species as well.

Protection and Rehabilitation of Degraded Watersheds

Obanil has elaborated on the viable alternatives aside from a large dam that could be able to deal with the problem. For once, he stated that biodiversity must be protected in all existing watersheds surrounding Metro Manila, with a critical emphasis on robust watershed management systems. La Mesa Dam, when managed with strong government regulation, paired with other water concessionaires, would undoubtedly curb the water problem and be far more sustainable. According to experts, it is also probable to look at the Laguna Bay and Wawa Dam as potential water sources (dela Cruz, 2019).

It has been said that watershed forests' conservation is the primary priority. In Angat and La Mesa, watersheds must be taken care of to ensure that water supplies for the NCR shall last for generations. Hence, protecting and rehabilitating degraded watersheds would yield a preemptive, practical, and affordable solution (La Vina, 2019). Instead of building a new dam, the government must focus on repairing, improving, and maintaining the existing dams since rehabilitating the current water reservoir would reduce reliance on main distribution facilities and systems. This involves nurturing the used water concessionaires to prevent water leakages in pipes, which is also a viable economic solution. Another possible action to take is to indulge in new technologies. There are lots of unexplored water sources which could be utilized with the proper approach. Instead of building dams, it is wiser to explore the wasted water, which amounts to 80 to 85 percent (Mayuga, 2019). The Haribon Foundation (2019) proposed that these waters when treated, can be used for landscape or agricultural irrigations and industrial processes. Lastly, there should be a thorough implementation of policies involving water conservation. With the LGC of 1991, it gives more responsibility to the local government to supervise issues concerning water conservation and sustainable practices.

On-going Movements and Resistance

With the arguments mentioned, the only solution is to stop the construction of the Kaliwa Dam and proceed to a more viable alternative. However, with the continuous progress in the mountains of Sierra Madre, the government does not consider halting the project as an option. It would more likely push the construction through despite the continuous calling out of the indigenous communities, activists, and environmental experts. Such plight was not new in the history of dam construction and developments, which oppresses the marginalized, and the most action they took was to form alliances and embody resistance. Fisher (2010) made it clear by indicating that forms of resistance in dam constructions tend to be more effective in asserting long-term interests rather than merely cooperating. Several countries, such as Latin America and Brazil, have collaborated with the international movement to oppose dam projects and show that they are not powerless. Initiatives such as the international conference in Curitiba, Brazil, which gathered the displaced people of dam construction, have proven themselves essential such that they collectively pronounced declarations saying that over the years, they have shown their growing power...that they are strong, diverse, and united and that their cause is, to assure that the struggle of the indigenous people all around the world is heard and recognized by the international community. They also made a moratorium saying that they will not stop demanding the communities' respective governments until "the territorial rights of indigenous, tribal, semi-tribal, and traditional populations affected by dams are fully respected through providing them with territories which allow them to regain their previous cultural and economic conditions (Fisher, 2010)."

In the Philippines, the growing movement of the Stop Kaliwa Dam Network (SKDN) has continually gained national and international support. They are very particular in their references as to why they strongly oppose the building of the dam, citing the scientific basis and broad implication of the dam construction. The government has said that the opposition merely comprises the "narrow-minded minority," Obanil has opposed this, saying that the grassroots have opposed the construction, except the Municipal Development Council of Gen. Nakar. Hence, this invalidation through coining narrow-mindedness is an attempt to silence the looming dissents from the involved indigency and groups of organizations and individuals who clearly articulated their position on the Kaliwa Dam, citing negative implications and impacts in social, environmental, economic, and cultural dimensions. Nevertheless, earlier movements of anti-dam notions in the Philippines have always focused on the malpractice and nonadherence to FPIC policies (Cariño & Colchester, 2010; Ibabao, Baliao & Lizada, 2013), and eco-social problems linked to political ecology as implied by externally funded development ventures (Kim, 2010). This pertains that the Kaliwa Dam project is only among the several issues of indigenous

marginalization concerning the displacement and dispossession of the Philippine IP (Talamayan, 2020). The Duterte administration has also, so far, worked in climate adaptation through violent measures, including subversion of indigenous people's land rights, exhorting devastating climate change realities, denigration of multilateral mitigation efforts as colonial injustice, and lastly, the extrajudicial killings of activists (Smith, 2022; Javante de Dios, 2022). The unsolicited infrastructure development also poses some concerns (Ito, 2022). These contextual environments must also be assessed in the discourse of indigenous struggle in the Philippines.

Reconsideration of the Cost and Benefits

The construction of large projects such as the Kaliwa Dam is demanded to weigh the cost and benefits. Fisher (2010) defined cost/benefit analysis (CBAs) as "generally weighing projections of aggregate costs against aggregate benefits of dam projects without regard for the distribution of these costs and benefits." When the projected effect is adverse, the justification for this would be that the aggregate benefit outweighs the sum of the cost (such cost is derived from the calculations of some accounts of negative implications to the displaced set of people, yet this does not sum for all of its adverse effects). This calculation is problematic because it tends to be constantly overestimated. In the equation, the analyst pursues a generalization that minimizes the values of resources, including the adverse threat that it poses to the endangered ecosystem.

In contrast, the benefit of having more water to supplement the shortage problem is maximized. With this, it is vital to consider the social and environmental costs before coming up with these tremendous projects. The limited purview only aggravates the problem that comes right after the construction of the large dams, making it appear unanticipated, rendering the concerned citizenry incapable of handling the consequences it poses. Thus, what is needed requires not a merely informed mechanism on what is to be considered as the cost and the advantage obtained in building dams, but the transformation that is incurred in every decision of development and a thorough reconsideration of the measures that should be conducted and recognizing what would be the trade-offs. Undoubtedly, there shall never be justice in acts that destroy communities to quench the thirst for resources of another.

Efforts to Reduce Water Consumption

Such a solution was already stated as an alternative; however, the means through which it will be conducted must be elaborated further. One of Obanil's concerns is the dire need to minimize the demand. This is done through massive educating of the citizenry and the aggressive promotion of conserving water to mitigate all non-revenue water by concessionaires. It should also be considered

that pilferage problems in the existing water systems contribute mainly to water loss. The government chose to create a new water system instead of just treating the problem that caused the shortage in the first place. The alarming trend of 20L to 400L water intake per person in Metro Manila is equivalent to 1-2 drums of water wasted per person (Yacat, 2011). It implies that particular action of the government must be focused on conserving water and even using recycled water through harvesting and investing even in rainwater. Another important proposal is separating what should be used for drinking and what can be used for cleaning and flushing the toilet since such measure assures more conserved water, thus reducing demand for water use. Furthermore, there are other sustainable supply networks to venture from, for instance, saltwater desalination, non-revenue water recovery, and rainwater harvesting (Roco, Alano, & Promentilla, 2022).

4. Multi-stakeholder Participation Framed After Deliberative Policy Analysis

The essence of the Kaliwa Dam situation is that it showcases the persistence of the Philippine community's traditional problems that disregard consultatory efforts citing political corruption and adherence to foreign demands rather than the immediate local necessities. Gera (2016) discussed the ethnic representation in the existing Philippine bureaucracy. Here, she stated that it is indeed beneficial to society to have indigenous people be participative in the government since it legitimizes it and nourishes the civil service to respond to the diversified communities' needs. Citing David Levitan (1946), she discussed that the institution might only acquire bureaucratic accountability when the bureaucrats genuinely represent the people and act as a proxy for people's aspirations. Going back to the claim of Stop Kaliwa Dam Network, all the indigents except their officials agreed to the project. Thus, the one tasked to collate the collective decision of the entire community has denied his role and made an unaccounted move. Hence, Gera (2016) provided coherence and relevance to the struggle of the marginalized indigenous people in society. It should also be stated that indigenous people could hardly acquire a share of opportunities in the civil service career, more so, demand something from the government. Thus, despite several initiatives like IPRA, the Sierra Madre mountains' indigency remained deprived of their rights to their ancestral domains.

The catastrophic impact of the lack of coordinative actions between the policymakers and the constituencies affected by the construction of Kaliwa Dam should have been prevented if a transparent model had been used to implicate the heuristic framework of multi-stakeholder integration and policy engagements. The Kaliwa Dam Project only implies the power dynamics of existing agencies with different ecological narratives; hence, public deliberation should consider this so that these power dynamics are neutralized. This has been the notion implied

by the deliberative policy analysis. As coined in Dryzek's (2007) formulation of a deliberative system, it is necessary to substantiate these three fundamental principles for achieving deliberation: authenticity, inclusiveness, and consequentiality:

(1) By authenticity, it means that the deliberation's primary focus is centered on (i) inducing reflection and sharing of preferences in the absence of impending threats or coercive measures, (ii) everyone was allowed to share opinions and those who have contrasting opinions may still find meaning and accept.

(2) There is inclusivity in the deliberation process as the discourse provides the opportunity to discuss the ideas of all affected actors or concerned representatives.

(3) By consequential, deliberation can make a difference in the overall collective outcome, that it may influence or determine a system's regulations according to the discourse's deliberative potential. These outcomes refer to laws, even codified decisions concerning public policy and international treaties, the informal ones concerning governance networks, or those that imply massive cultural changes.

Furthermore, Dryzek (2007) stated that the prime goal of the deliberative process has never been about forming consensus; instead, it is to produce a meta-consensus that structuralizes continued disputes. Also, in proceeding to subsequent cases of studying deliberations, Dryzek (2007) provided an analytical framework relevant to operationalizing deliberative systems. The framework constitutes six critical elements utilized in thoroughly assessing a given system as it corresponds to the principles mentioned above of inclusiveness, authenticity, and consequentiality:

(1) An existence of a public space where such discourses are held and wide-ranging communications are conducted. Such a place is preferred to have no legal restrictions or constricting barriers.

(2) There is an empowered space, which deviates from the public space in a way that such space is where it caters to authoritative decisions.

(3) There is the notion of transmission, which means that the deliberation in public space is not isolated to how the empowered space deliberates public policies; it directs and influences it.

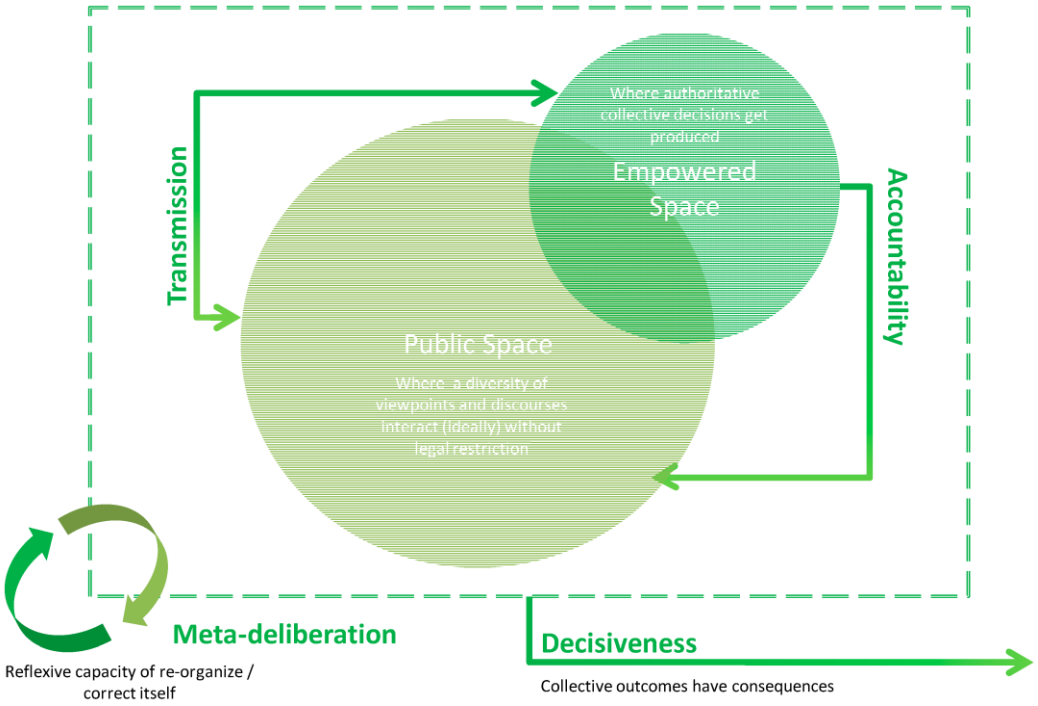
(4) Accountability is upheld. The actors of empowered space who enact meaning mechanisms are given an account of whatever actions or decisions they come through.

(5) The meta-deliberation or the reflexive capacity of the system exists where it deliberates the whole organization and creates corrective or reformatory measures.

(6) There is a sense of decisiveness as understood in the purview that the collective outcomes are products of the corroborated efforts inside the system.

The deliberative public policy framework as an approach to the Kaliwa Dam Project construction is suitable for the case Kaliwa Dam Project because abiding by the previous issues discussed, like the economic scarcity notions, biodiversity problems, geographic hazard, and social displacement problems, can be addressed in a space where people from different backgrounds are free to vent out their experiential inputs. The community-centered network for collaboration must be understood in the purview of systemic and systematic injustices experienced by IP communities (Kingdon, 2022). Habermas (1984), in looking at the social dimension of philosophy, has focused on the possibility of understanding people's lifeworld (formed identity from unique aggregated experiences) and deems that consensus is met when people can negotiate and employ communicative rationality in their discourses. Furthermore, public participation, which was encouraged in a deliberative framework, enhances institutional and policy legitimacy, citizen influence, learning, and social responsibilities (Petts, 2001)

Figure 4: The Diagram of Dryzek's (2007) Deliberative Policy Framework



Source: Dryzek (2007)

While the deliberative policy framework assumes the ideal state of public space and Locke's purview of human nature—which means each actor is motivated by inherent goodness within them—this assumption may deviate from the actual reality, which in turn, makes the application of deliberative framework a lot more challenging in the context of the Kaliwa Dam construction. The following points further implicate these hurdles:

- The immediacy of the matter and the resources for deliberative initiatives. Among the criticisms of the deliberative policy framework is the time factor, which considers the duration of the deliberation process to achieve consensus. The urgency of the water scarcity problem in NCR requires immediate solutions. The thorough derivation of meticulously crafted responses from an authoritative body must inculcate various responses and integrate opinions from stakeholders with distinct interests. It also requires resources to fund these efforts and initiatives and to ensure that all stakeholders are accounted for in policy formulations.
- The emotional factor in consensus building. In deliberative discussions, there is a tendency to focus on factual notions, not to mention the various emotions that appeal to individuals, like feelings, interior modes/moods, drives, and desires, which manifest in an unconscious, unreasonable, and irrational manner. In the conduct of discussion, people are not merely wired for reasons but also for how emotions put forth ideas at the table (Backer, 2016). This is overlooked in deliberative democracy as it assumes minds as something free from the manifestation of preconceived notions. Hence, desires must be suppressed (Ruitenberg, 2009, p. 3). This can be mended through meticulous discourse that thoroughly filters the most reasonable discourses in a rigid deliberative process—and yet, there must be a contextual derivation of the simplistic framework for the deliberative public policy to mend individual differences.
- The Philippine political system, traditional values, and purview of crony capitalism in indigenous issues and policy response. The adherence to neoliberalism as the focal basis of economic activity limits the intervention of the government in societal affairs; hence, it does not concern itself with mediating critical issues like the disruption of communities with large-scale developmental projects (Bello, 2019)—like the Kaliwa Dam project so long as it augments market activity. The Philippines is tied to neoliberal discourse, which is also neatly intertwined with the corruption brought by the rampant crony capitalism in the country. The country's institutions are relatively weak with the presence of rent-seeking elites—which is also rooted in the country's political culture dominated by patronage and clientelism (Hau, 2022). As a result, it hinders any potential steps for consultatory measures, including inputs from marginalized sectors. These crony capitalists have also displayed a level of loyalty to external

influences like China or the US to achieve personal interests. This has been elaborated by Sison (1970) in expressing how the imperialist countries have taken advantage of the weakness of the country's political system. Hence, for attempts to have consultatory procedures and deliberative conduct, these issues need to be resolved and supplemented with adequate solutions that guarantee the existence of Dryzek's six critical elements of the deliberative framework.

5. Conclusion

This paper provides the background of the Kaliwa Dam Project and a thorough analysis of the underlying issues embedded in its construction. Hence, it discusses the background and shredding of the case, implicating the halting of the Kaliwa Dam Project in Quezon Province due to the violation processes, the biodiversity issues, also the human consequence with the inclusion of a similar context which should be considered in analyzing the dimensions of the discourse, the incurred disaster risk hazard, and finally the implication of the project regarding Philippine's ballooning debt. Furthermore, potential alternatives were also laid down, which tackle the reconsideration of the Japanese Firm's weir construction, building networks, mass movements and improvements of collaboration, reevaluation of the project's costs and benefits, reechoing of water conservation measures to reduce water demands, and lastly, rehabilitation of degraded watersheds.

Table 1: Summary of Arguments on Halting Kaliwa Dam Construction and the Alternatives/ Prospected Solutions

On Halting the Kaliwa Dam Construction	Alternatives/ Prospected Solutions
Contentions on violation of legal processes in the issuance of Environmental Compliance Certificate (ECC)	Reconsideration of the Japanese firm's weir construction
Disagreements concerning complete disregard for biodiversity issues	Building networks, mass movements, collaboration, and resistance
The implication in terms of human consequences	Reevaluation of the costs and benefits
The threat to disaster risk hazards	Reechoing efforts to reduce water consumption through wise use and conservation measures
Ballooning debt and the incurred economic repercussions	Rehabilitation of degraded watersheds

While the means to go forward are immediate, this paper also offers the multi-stakeholder participation implied by the deliberative policy framework. It means the inclusion of all sectors of society in deciding socially and ecologically altering development projects requires adherence to coordination with people who are anticipated to be direly affected and analysis from experts. With this, it is also imperative that thorough scrutiny of the framework is meticulously investigated, especially in the case of the Kaliwa Dam project, to examine its viability. Hence, the paper presents the possible constraints of applying the framework in the case, especially when looking at the purview of the Philippine political situation. These were discussed in the immediacy of the matter at hand and the resources for deliberative initiatives, the hurdle of deliberative framework that there are emotional factors in the process of consensus building, and lastly, the context of the Philippine political system, traditional values, and purview of crony capitalism in indigenous issues and policy response.

In understanding the notions of political dynamics in inter-indigenous discourse, Kerkvliet's (2009) understanding of conventional politics provides that it only takes stirring of these indigenous communities' political environment to make them react with engagement. As he has said, politics does not just settle to authorities or organizations; it forms everywhere, whenever there are people and communities. This is important, especially since what has been missed by technocratic ventures to whom initiators of policies and political maneuvers are the awareness of the ongoing political discourse of the community where such implementation was acted upon. Hence, this refers to ordinary people and the peasantry who could be engaged in political life just by working day per day, which in turn has grasped and comprehended, in their context, the social system they are in. In this regard, in the case of Kaliwa Dam, we could assume that these indigenous communities employ the uniquely formed conventional politics in their communities, and the only means to permeate these bubbles of political ideas and insight is to engage them in meaningful discourse; this is what the deliberative policy framework offers.

References

Aiken, S. R., & Leigh, C. H. (2015). Dams and Indigenous Peoples in Malaysia: Development, Displacement, and Resettlement. *Geografiska Annaler: Series B, Human Geography, 97*(1), 69-93.

Athayde, S. (2014). Introduction: Indigenous Peoples, Dams, and Resistance. The University of Florida. *Tipití: Journal of the Society for the Anthropology of Lowland South America, 12*(2). https://digitalcommons.trinity.edu/cgi/viewcontent.cgi?article=1181&context=tipiti

Backer, D. (2016). Democracy and Education: The Critique of Deliberative Discussion. West Chester University of Pennsylvania. *Democracy and Education, 25*(1), 1-6.

Bajo, A. F. (2021). *House Panel Wants Construction Work in Kaliwa Dam Project to Stop*. GMA News. https://www.gmanetwork.com/news/topstories/nation/791002/house-panel-wants-construction-work-in-kaliwa-dam-project-to-stop/story/

Barney, K., & Souksakoun, K. (2021). Credit Crunch: Chinese Infrastructure Lending and Lao Sovereign Debt. *Asia & the Pacific Policy Studies, 8*(1), 94-113.

Behera, D. K. (2013). Dams, Development and the Exclusion of Indigenous Groups: A Case from Odisha. In U. Skoda, K. B. Nielsen, & M. Q. Fibiger (Eds.), *Navigating Social Exclusion and Inclusion in Contemporary India and Beyond: Structures, Agents, Practices* (pp. 167-187). Anthem Press.

Bello, W. (2019). *Neoliberalism as a Hegemonic Ideology in the Philippines*. Transnational Institute. https://www.tni.org/en/article/neoliberalism-as-hegemonic-ideology-in-the-philippines

Camba, A., Cruz, J., Magat, J., & Tritto, A. (2021). Explaining the Belt and Road in the Philippines: Elite Consolidation, Construction Contracts, and Online Gambling Capital. In J. C. Liow, H. Liu, & G. Xue (Eds.), *Research Handbook on the Belt and Road Initiative* (pp. 138-150). Edward Elgar Publishing.

Cariño, J., & Colchester, J. (2010). From Dams to Development Justice: Progress with 'Free, Prior, and Informed Consent' Since the World Commissions on Dams. *Water Alternatives, 3*(2), 423-437.

Chavez, L. (2023). *A Philippine Tribe that Defeated a Dam Prepares to Fight its Reincarnation*. Indigenous Peoples Major Group for Sustainable Development. https://indigenouspeoples-sdg.org/index.php/english/ttt/1249-a-philippine-tribe-that-defeated-a-dam-prepares-to-fight-its-reincarnation

Chirathivat, S., Rutchatorn, B., & Devendrakumar, A. (Eds.). (2022). China's Belt and Road Initiative in ASEAN: Growing Presence, Recent Progress and Future Challenges. World Scientific.

Clemente, T. S. (2022). Discourse, Empirics, and Perceptions on Investment and Aid: Reconsidering Chinese and Japanese Relations with the Philippines. In M. Tanigaki (Ed.), *Japan and Asia* (pp. 43-78). Springer.

Conde, M. (2019). *President 'Misinformed or Misinforming' Public About Kaliwa Dam, Say NGOs*. Rappler. https://www.rappler.com/nation/245014-duterte-either-misinformed-misinforming-public-about-kaliwa-dam-project/#:~:text=Obanil%20said%20that%2C%20%E2%80%9Cthe%20funding%20for%20the%20dam,the%20concerns%20of%20IPs%20or%20Metro%20Manila%E2%80%99s%20residents

dela Cruz, R. (2019). *Laguna de Bay is Now a Source of Potable Water*. manilastandard.net. https://www.manilastandard.net/business/corporate/301456/laguna-de-bay-now-a-source-of-potable-water.html

Dryzek, J. S. (2007). Theory, Evidence, and the Tasks of Deliberation. In S. Rosenberg (Ed.). *Deliberation, Participation and Democracy: Can the People Govern?* (pp. 237–250). Palgrave-Macmillan.

Dwivedi, R. (2002). Displacement, Risks and Resistance: Local Perceptions and Actions in the Sardar Sarovar. *Development and Change, 30*(1), 43-78. https://doi.org/10.1111/1467-7660.00107

Fisher, W. (2010). *Going Under: Indigenous Peoples and the Struggle Against Large Dams*. Cultural Survival Quarterly Magazine. https://www.culturalsurvival.org/publications/cultural-survival-quarterly/going-under-indigenous-peoples-and-struggle-against-large

Fulgar, I. (2021). *Environmental Compliance Certificate Online Application. Architect in the Philippines into New Designs & Land Ventures.* Architect in the Philippines into New Designs & Land Ventures. https://www.ianfulgar.com/property-development/environmental-compliance-certificate-online-application/

Garcia, M. A. (2019). *What is the Kaliwa Dam Project?*. GMA New Online. https://www.gmanetwork.com/news/topstories/nation/713465/what-is-the-kaliwa-dam-project/story/

Gera, W. (2016). The Politics of Ethnic Representation in Philippine Bureaucracy. *Ethnic and Racial Studies, 39*(5), 858-877.

Habermas, J. (1984). Habermas: Questions and Counterquestions. *Praxis International, 4*(3), 229-249.

Haribon Foundation. (2019). *Stop Kaliwa Dam*. Haribon Foundation. https://haribon.org.ph/stop-kaliwa-dam/

Hau, C. S. (2016). *What is "Crony Capitalism"?*. Center for Southeast Asian Studies, Kyoto University. https://archive.ph/JGsAl#selection-453.17-453.69

Heller, P., & Rao, V. (Eds.). (2015). *Deliberation and Development: Rethinking the Role of Voice and Collective Action in Unequal Societies*. World Bank Publications.

Hite, E. B. (2022). The Many-headed Hydra: Assessing the Indigenous-Hydropower Cycle in Costa Rica. *Journal of Political Ecology, 29*(1), 656-671.

Ibabao, R. A., Baliao, M. E. D., & Lizada, J. C. (2013). A Review of Free Prior Informed Consent Implementation: The Case of a Large Dam Project in Iloilo, Philippines. *Philippine Journal of Social Sciences and Humanities, 18*(2), 49-63.

Ito, S. (2022). Changes in Infrastructure Governance Over Three Decades in the Philippines. In S. Ito (Ed.), *Infrastructure Development and Public–Private Partnership* (pp. 57-77). Springer.

Iuchi, K., & Esnard, A. (2008). Earthquake impact mitigation in poor urban areas: The case of Metropolitan Manila. *Disaster Prevention and Management, 17*(4), 454-469. https://doi.org/10.1108/09653560810901700

Javate de Dios, A. (2022). Democracy Under Strain in the Philippines: The Populist Politics and Diplomacy of President Rodrigo Duterte. In R. G. Patman, P. Köllner, & B. Kiglics (Eds.), *From Asia-Pacific to Indo-Pacific* (pp. 303-325). Palgrave Macmillan.

Jiang, J. (2022). *Laos Faces Debt Crisis After Borrowing Billions from China*. EAST ASIA. https://www.voanews.com/a/laos-faces-debt-crisis-after-borrowing-billions-from-china-/6641633.html#:~:text=According%20to%20a%20World%20Bank%20report%20published%20in,loans%20to%20fund%20projects%20including%20the%20China-Laos%20railway

Kerkvliet, B. (2009). Everyday Politics in Peasant Societies (and Ours). *The Journal of Peasant Studies 36*(1), 227-243.

Kim, S. (2010). Greening the Dam: The Case of the San Roque Multi-purpose Project in the Philippines, *Geoforum, 41*(4), 627-637.

Kingdon, R. (2022). *Dam Watch International: The Role of Community-grounded Transnational Collaboration in Countering "Sustainable" Dam Development Worldwide* [Master's thesis, University of Manitoba].

La Vina, T. (2019). *The Illegal and Immoral Kaliwa Dam ECC*. Rappler. https://www.rappler.com/voices/thought-leaders/opinion-the-illegal-and-immoral-kaliwa-dam-ecc

Levitan, D. (1946). The Responsibility of Administrative Officials in a Democratic Society. *Political Science Quarterly, 61*(4), 562-598.

Macan-Markar, M. (2020). *Laos' Debt Woes Worsen as Bills for China-funded Dams Loom*. Nikkei Asia. https://asia.nikkei.com/Spotlight/Coronavirus/Laos-debt-woes-worsen-as-bills-for-China-funded-dams-loom

Maher, R. (2019). Pragmatic Community Resistance Within New Indigenous Ruralities: Lessons from a Failed Hydropower Dam in Chile. *Journal of Rural Studies, 68*, 63-74.

Mallari, D.T., & Reyes, D. (2022). Green Group Welcomes Kaliwa Dam Project Suspension. INQUIRER.NET. https://newsinfo.inquirer.net/1680380/green-group-welcomes-dam-project-suspension

Mayuga, J. (2020). *All Eyes on the Kaliwa Dam Project: Will Its Benefits Outweigh the Costs*?. BusinessMirror. https://businessmirror.com.ph/2020/05/28/all-eyes-on-the-kaliwa-dam-project-will-its-benefits-outweigh-the-costs/

Miraflor, M. B. (2022). *Kaliwa Dam Feared to Worsen Flooding in Metro Manila*. Manila Bulletin. https://mb.com.ph/2020/11/17/kaliwa-dam-feared-to-worsen-flooding-in-metro-manila-1/

Morse, B., & Berger, T. R. (1992). *Sardar Sarovar-Report of the Independent Team*. Resource Futures International Inc.

Petts, J. (2001). Evaluating the Effectiveness of Deliberative Processes: Waste Management Case-studies. *Journal of environmental planning and management*, *44*(2), 207-226.

Raymundo, P. (2019). *Japanese Firm Renews Proposal on Kaliwa Dam Project*. Philippine News Agency. https://www.pna.gov.ph/articles/1064848

Roco, J. B. A., Alano, V. H. O., & Promentilla, M. A. B. (2022). Urban Water Supply Planning and Management Via an Integrated P-graph-Analytic Hierarchy Process Framework. *Chemical Engineering Transactions*, *94*, 1081-1086.

Ruitenberg, C. W. (2009). Educating Political Adversaries: Chantal Mouffe and Radical Democratic Citizenship Education. *Studies in Philosophy and Education*, *28*(3), 1-10.

See, T., & See, C. (2019). The Rise of China, New Immigrants and Changing Policies on Chinese Overseas: Impact on the Philippines. In D. Singh & M. Cook (Eds.), *Southeast Asian Affairs 2019* (pp. 275-294). ISEAS–Yusof Ishak Institute.

Simon, C. (n.d). Philippine Eagle. The Peregrine Fund. https://www.peregrinefund.org/explore-raptors-species/eagles/philippine-eagle

Sison, J. (1970). Climates of Control: Violent Adaptation and Climate Change in the Philippines. *Political Geography, 99*. https://doi.org/10.1016/j.polgeo.2022.102740

Smith, W. (2022). Climates of Control: Violent Adaptation and Climate Change in the Philippines. *Political Geography, 99*, 102740.

Smith-Morris, C., Juaréz-López, B. N. M., Tapia, A., & Shahim, B. (2022). Indigenous Sovereignty, Data Sourcing, and Knowledge Sharing for Health. *Global Public Health, 17*(7), 1-11.

Talamayan, F. (2020). *Mapping Anti-Dam Movements: The Politics of Water Reservoir Construction and Hydropower Development Projects in the*

Philippines. International Center for Cultural Studies Working Paper Series. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3748391

Wang, Z., & Fu, Y. (2022). Local Politics and Fluctuating Engagement with China: Analysing the Belt and Road Initiative in Maritime Southeast Asia. *The Chinese Journal of International Politics, 15*(2), 163-182.

Wijaya, T. (2022). *The Political Economy of Japanese and Chinese Infrastructure Financing Governance in Indonesia: Organising Alliances, Institutions, and Ideology* [Doctoral dissertation, Murdoch University].

World Commission on Dams. (2022). *The World Commission on Dams.* International Rivers. https://archive.internationalrivers.org/campaigns/the-world-commission-on-dams

Yacat, R. (2011). *How Much Water Do Households Require?*. Philippine Institute for Development Studies. https://issuu.com/ryacat/docs/pidspn9911#:~:text=Estimates%20of%20water%20usage%20in%20Metro%20Manila%20by,Corplan%201996%2C%20Haman%201996%2C%20David%20and%20Inocencio%201996a%29

Yang, L. (2007). *China's Three Gorges Dam Under Fire.* Time. http://content.time.com/time/world/article/0,8599,1671000,00.html