Research Article

Water Security and Social Tension:
Analyzing Resource-Based Disputes in Trinidad, Bohol

Gelyn S. Puracan[1] Noe John Joseph E. Sacramento[2]

Abstract

Water security remains a pressing challenge in the Philippines, especially in rural communities like Trinidad, Bohol, where river degradation from agricultural runoff has made natural water sources unsafe for consumption. The high cost of deep well construction further limits access, disproportionately affecting economically disadvantaged households and intensifying local disputes over scarce potable water, particularly during the dry season. This paper contends that the resulting local disputes highlight the need for deliberative practice in community governance, where actors are brought together, which is instrumental to peace and resource security. Utilizing the lens of political ecology and governance theory in a case study approach, and using key informant interviews and secondary data, particularly using thematic analysis in analyzing the responses of the eight (8)

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[1] Lecturer, Political Science and Public Affairs Program, University of the Philippines Cebu
Email: gspuracan@up.edu.ph (Corresponding Author)

[2] Assistant Professor, Political Science and Public Affairs Program, University of the Philippines Cebu
Email: nesacramento@up.edu.ph

key informants from the interview, we answer how water scarcity for households contributes to social tensions in Trinidad, Bohol, and what governance strategies can mitigate these tensions. The case illustrates that while it has been proven that water resources can instigate tension and conflict, however, participatory approaches and models are potential elements that forward peaceful dialogue through a collective consensus and sense of ownership of the process among community stakeholders.

Keywords: Water Security, Social Tension, Peace, Deliberative Practice, Participatory

Introduction

Water security is a critical challenge for rural communities in the Philippines, where access to clean and safe freshwater is a fundamental yet increasingly scarce resource. Freshwater, in the context of rural areas and provinces, is significant for daily household activities such as cooking, bathing, and washing. As a limited yet necessary resource, it is essential for human survival and maintaining agricultural works, industrial operations, and even ecological balance (Layani et al., 2021). Water is the backbone of food production, with nearly 70% of global freshwater withdrawals allotted to agriculture, making its availability a determining factor in terms of food security and rural livelihoods (Food and Agriculture Organization of the United Nations, n.d.).

In the case of the Philippines, where rice farming and fisheries depend heavily on freshwater resources, disruptions in water supply can have multiplier effects on economic stability and community well-being (World Health Organization, 2019; Ulep et al., 2024). Moreover, water plays a critical role in maintaining biodiversity, as rivers and wetlands serve as habitats for diverse flora and fauna while also regulating climate patterns (Layani et al., 2021).

However, water supply faces immense constraints from growing populations (McDonald et al., 2014), economic development, environmental degradation, and climate change (United Nations Peacekeeping, n.d.). The country's decline in per capita water availability has been widely recorded and monitored (Rola et al., 2015), as urban expansion, industrial growth, and an increasing population demand more water consumption than in previous decades (Ritchie & Roser, 2018). Indisputably, economic development generally goes

along with urbanization, which increases per-capita water use, as new technologies such as showers, washing machines, and dishwashers increase residential use of water (McDonald et al., 2011; McDonald et al., 2014). At the same time, watersheds are being degraded and corrupted by agricultural runoff, deforestation, and pollution (Erickson-Davis, 2016), further limiting access to water and contributing to what has been described as "artificial scarcity" (Rola et al., 2015).

Clean water scarcity threatens public health and socio-economic development, increasing waterborne diseases like diarrhea, especially in underserved regions such as the Bangsamoro Autonomous Region and Region IV-B (Ulep et al., 2024). A joint study by PIDS and UNICEF Philippines found that up to 50% of people in these areas rely on unsafe water, posing serious health risks (Ulep et al., 2024). Water scarcity also fuels local disputes, especially where water is a shared resource.

Trinidad is one of the 47 municipalities in the province of Bohol, Philippines, with a total population of 35, 119 as of May 01, 2020 (Philippine Statistics Authority, 2022). The town features a combination of coastal and inland terrains and is surrounded by its neighboring municipalities: on the North is the Municipality of Talibon, on the East is the Municipality of Ubay, on the South is the Municipality of San Miguel, and on the West is the Municipality of Danao (Municipality of Trinidad Official Website, n.d.). The residents speak Boholano (Bisaya), and every 15th of May, the municipality celebrates the feast of San Isidro Labrador emphasizing its agricultural roots because the town is largely agrarian: farming and aquaculture. Access to potable water has been a pressing issue for residents in the municipality, with so many households historically depend on

rainwater collection and shallow dug wells which usually ran out of water during dry season which generally spans from December to May (Philippine Atmospheric, Geophysical and Astronomical Services Administration, n.d.). Aside from the aforementioned water sources, some households also depend on two water systems in the municipality: Trinidad Water Work System in Barangay San Vicente, and the Richli Water in Barangay Hinlayagan Ilaud. However, according to TWSO representatives, the filtration system of the first water system is defunct, making it unsafe for cooking. Meanwhile, the second water system has high connection costs and is inaccessible to residents in remote barangays and geographically isolated areas.

Moreover, in Trinidad, agricultural runoff from rice farming has polluted local rivers, affecting daily use for bathing, cooking, and washing, similar to the point of Rola et al. (2015) on water contamination and governance failures that compound the problem of scarcity. On the other hand, deep wells can be an alternative water source; however, the high cost of digging and constructing deep wells only allows well-off families to build one, further exacerbating inequalities. These water-linked tension intensifies during dry seasons when water becomes scarce, especially for those without alternative sources, leading to tensions between people in the community.

The complexities of water scarcity in the Philippines cannot be addressed without considering the broader context of resource governance. Effective water governance is essential to ensuring equitable access to water and avoiding or minimizing conflicts over its allocation. However, as Rola (2019) argues, water governance in the Philippines is fragmented, with over 30 national and local agencies involved in water management, but it lacks coordination

and clear policies. This fragmentation complicates water allocation and weakens the capacity to manage water resources sustainably, often leading to local disputes and inefficiencies. Addressing these governance challenges is critical to resolving tensions and ensuring water is distributed fairly among the residents.

Effective water governance requires clear policies, institutional frameworks, and inclusive decision-making. Community participation is essential, involving local communities, government agencies, and other stakeholders (Abeywardana et al., 2018; Behailu, 2016). Deliberative practices in governance, as emphasized by Dryzek (2010) and Dore (2014), argued that dialogue and inclusivity allow for diverse perspectives to be heard and ensure that water management strategies are equitable and sustainable. In the Philippines, adopting community-based governance models can help strengthen local institutions, empower marginalized communities, and foster collaboration, all essential for sustainable water management.

The relationship between water security, resource governance, and local peace underscores the importance of effective water management in fostering social stability. Conflicts and tension over water allocation and poor governance practices can destabilize communities and hinder development efforts. The United Nations Peacekeeping cited that 40 percent of conflicts are linked to natural resources such as water (United Nations Peacekeeping, n.d.), and competition for scarce resources such as water can escalate into violent conflicts if not properly managed and addressed (Ide, 2015). Catindig-Reyes (2019) emphasizes that intervention should follow an egalitarian or utilitarian approach that upholds basic human rights and environmental needs while ensuring people's participation in

different water services. The illustrative case of Trinidad, Bohol–where tensions over water access and contamination highlight broader resource-based tensions in rural areas–will shed light on inclusive, transparent, and community-based water governance potentials (UNDP, 2018) in alleviating these conflicts through fair distribution and addressing grievances before they escalate.

Research Question and Objectives

This paper investigates how water scarcity for households contributes to social tension in Trinidad, Bohol, and what governance strategies can mitigate these tensions. Specifically, this aims to: 1) examine the causes and dynamics of household water-related tensions in Trinidad, Bohol, focusing on stakeholder perspectives and governance challenges; 2) analyze the effectiveness of existing water governance mechanisms and deliberative approaches in tension and conflict resolution; and 3) propose sustainable and inclusive water management strategies that promote peace and resilience in Trinidad, Bohol.

Research Methodology

This study utilized a case study approach to analyze water scarcity-related tensions in Trinidad, Bohol, allowing for a detailed, context-specific analysis of local water governance and conflict dynamics. The case study design is particularly effective for answering "how" and "why" questions, providing deeper insights at a micro level (Yin, 2018). It enables a thorough examination of real-life phenomena, their interconnectedness, and local challenges (Baxter & Jack, 2010). This approach provides both descriptive and

analytical knowledge, which can inform policy discussions and suggest solutions applicable to similar rural areas in the Philippines (Stake, 1995; Flyvbjerg, 2011). The areas studied are shown in Figure 1.

Figure 1. Location of the Bohol in the Philippines

   To address the research objectives, the study gathered primary data through key informant interviews with government officials, community leaders, residents, and water management agencies in Trinidad, Bohol, selected for their expertise in water management and tension and conflict resolution. A total of eight key informants participated in this study: six were local residents and three representatives of the Trinidad Water System Office (TWSO). These interviews offer insights into local water governance and the causes and solutions of water-related conflicts. Secondary data from academic articles, government reports, and community records provide additional context on water governance and conflict dynamics, highlighting broader trends, policies, and governance gaps. These data

sources provide a comprehensive analysis of water-related conflicts and disputes and inform sustainable water governance strategies. Delving deeper into data analysis, the data gathered has undergone thematic analysis which allowed the researchers to recognize and determine themes and patterns within the certain collection. The research was conducted over a period of three months, spanning from January to March 2025. This timeframe encompassed the entire research process, including the formulation of research questions, field work in Bohol, data analysis, and interpretation of findings.

Theoretical Underpinnings

This study is grounded in the frameworks of political ecology and governance theory, both of which provide critical lenses for understanding the intersection of environmental scarcity and socio-political dynamics. Political ecology examines how access to and control over natural resources, such as water, are mediated by broader power relations, often privileging economically and geographically advantaged groups while marginalizing others (Peluso & Watts, 2001; Zimmerer & Bassett, 2003; Robbins, 2012). In the context of Trinidad, Bohol, unequal water access reflects not only ecological degradation, but also structural inequities embedded in local spatial and political arrangements, making the aforementioned lens highly significant in this study. Complementing this, governance theory emphasizes the role of institutional arrangements, decision-making structures, and participatory processes in managing public resources. It critiques top-down, centralized governance for eroding local capacities to respond effectively to community needs (Scott, 1998), and argues for participatory, multi-level governance models that foster trust, inclusion, and legitimacy (Fischer, 2012; Grote & Gbikpi, 2002). Taken together,

these theories reveal how water scarcity in Trinidad is both a material and political issue, and how inclusive, deliberative governance can serve as a pathway toward social cohesion and sustainable peace.

Findings and Discussion

  1. Background: The Trinidad, Bohol Case
  1.1 Unequal Water Sources and Limited Accessibility

  In selected barangays[3] of Trinidad, Bohol in the Central Philippines (namely: Hinlayagan Ilaya, Santo Tomas, Poblacion, and San Vicente), there are evident inequalities in culinary water access among households. While some residents have private wells, some are connected to the municipal water system, where they pay monthly fees depending on their water consumption, while others rely on communal hand pumps or distant water sources. Another source of water is the newly opened Richli Water, located in Hinlayagan Ilaud, Trinidad, Bohol, a public-private partnership linked to the family of the mayor's daughter, which offers filtered river water that is safe for culinary use. However, the high connection expenses, particularly when buying hoses and other necessary materials, and ongoing usage costs and maintenance make this system financially inaccessible for many low-income families. Additionally, the Trinidad Water Work System is another source of water located in San Vicente, Trinidad, Bohol, which was initially intended to provide affordable water. However, the representatives of the TWSO revealed that the filtration system is now

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[3] In the Philippine administrative system, a barangay is the smallest political unit functioning similarly to a village or neighborhood; it delivers basic services and implements local policies (Porio & Roque-Sarmiento, 2019).

defunct, making the water unsafe for consumption unless it's used for bathing and cleaning.

These inequalities are compounded by the geographic challenges of delivering water to remote barangays, where households lack the infrastructure to connect to municipal water services such as Brgy, Kauswagan, Trinidad, Bohol, a mountainous barangay in the municipality. According to some informants, there were also instances when the water supply of a particular dug well ran out, so they would find dug wells from other places which have better supply, this means that they would have to spend an additional amount for the gasoline of their motorcycle that is used to carry the containers of water. Those who do not have motorcycles carry the heavy containers on their shoulders, walking kilometers. This spatial exclusion intensifies perceptions of neglect, particularly among marginalized people who view local government interventions as inadequate or selective, which aligns with the findings of the study by Victor et al. (2022), emphasizing that spatial disparity contributes to unequal access to essential resources.

1.2 Economic and Bureaucratic Barriers to Water Access

Access to water is not only shaped by physical availability but also by economic and bureaucratic hurdles. Key informants describe the complex and costly process of connecting to the municipal water system. Informant E said, *"There are too many requirements when applying to the faucet system of the Local Government Unit (LGU), aside from the requirements, we need to buy a hose and other necessary materials for connection too."* (Direct translation from the narrative of Informant E, a vendor and an active citizen in the community). This is supported when the representatives of the

Trinidad Water System Office (TWSO) revealed that there are a total of 10 requirements for securing water connection, namely: Letter of Intent, Orientation Certificate, Completed Application Form with Water Service Contract, Barangay Clearance, Tax Declaration/Deed of Sale Title/ Contract of Lease, Tax Clearance Current, Valid I.D. of the Applicant, 3 pcs of 2x2 picture of the Applicant, Pipeline Right of way of lot owner (if it passes through a private property, and Excavation Clearance (if the water connection traverse to the National, Provincial, Municipal Road). On top of the requirements, the office also revealed that the local government imposes a Php 40.00 per cubic meter fee when it is distributed to them by the distributor for Php 30.00 per cubic meter. For many households, these expenses and the long list of requirements are prohibitive, reinforcing patterns of exclusion, especially considering that most residents are farmers and do not have regular income (Abraham, 2018).

As a result, many residents remain dependent on alternative sources, particularly private dug wells, which deepen social divisions between those who own these resources and those who do not. The high cost of digging a well - estimated at Php 40,000.00 according to the local carpenter and laborer in the community - excludes the most economically vulnerable households, forcing them to rely on their neighbors, which frequently leads to social tensions and disputes. Informant E explained:

> *"Access is unequal because not everyone can afford it; poorer families like us suffer more, especially when the water source, such as a dug well, is scarce and even far away, because we have no choice, we have to accept it. Building a well is very expensive"*

Informant B, a college student and active citizen in the community, added, *"Labor alone costs almost Php500-600 per day, not including cement, hollow blocks, steel bar, etc. Building a well is costly"*. The labor cost for digging a well is approximately Php 500.00 to Php 600.00 per day (according to the local carpenters and laborers in the community), beyond the means of many residents. The economic burden extends to those seeking to develop private water sources. Families unable to afford this expense negotiate access with deep well owners, often resulting in conflict over resource sharing, especially during the dry season, wherein the water resources for culinary water because too scarce. These financial and bureaucratic barriers limit access to water and deepen existing socio-economic inequalities, fostering a sense that water is a privilege rather than a right (Abraham, 2018).

From a political ecology perspective, the unequal access to water in Trinidad reflects broader power relations where economic privilege determines who can access safe and reliable water sources (Zimmerer & Bassett, 2003). The public-private partnership with Richli Water exemplifies how elite families with ties to local governance commodify natural resources, excluding low-income residents. Additionally, the geographic exclusion of remote barangays from the municipal water system reflects political ecology's argument that resource distribution is shaped by spatial inequalities (Robbins, 2012). Bureaucratic barriers further reinforce this exclusion, making water a privilege accessible only to those with the economic and social capital to navigate these processes.

1.3 Governance Gaps and the Failure of Barangay Intervention

A notable finding is the absence of effective intervention from barangay officials. Respondents express frustration that barangay leaders are largely passive, limiting their role to disseminating information rather than engaging in active conflict resolution or infrastructure improvements. Most governance responsibilities regarding water access remain centralized at the municipal level, leaving Barangays unresponsive to local concerns and people disempowered from such policy issues. A representative from TWSO said:

> *"The barangay doesn't get involved much—we are the ones who directly face the people's complaints when there's no water. Barangay officials mainly disseminate information about training sessions or voluntary activities. Most of the work related to water governance is handled by the municipal office, and barangay officials are only involved when there are orientations or reports to be made"*

This failure of intervention is further supported by the informants answers when they were asked how the barangay officials or LGU solved the issue, and a consensus among them states that the issue was just forgotten. It never reached to barangay level, resulting in just letting it go and being buried when the rainy season comes. This systemic inaction has allowed conflicts to escalate unchecked. Residents perceive barangay officials as prioritizing political interests over community welfare, particularly during elections when public consultations become performative rather than substantive. An informant said, *"It would be better if surveys are conducted so that they will know our situation and struggles on the ground; however, they only do surveys when elections are approaching"* (Anonymous, a 65-year-old local farmer).

The failure of barangay governance to address these urgent issues erodes public trust and leaves affected communities to navigate these tensions on their own.

Governance theory reveals that centralized decision-making weakens local capacity to address resource conflicts (Scott, 1998). In Trinidad, barangay officials' limited involvement reflects a breakdown in multi-level governance, where critical decisions remain with municipal offices rather than community actors. It was evident when the TWSO representatives revealed that barangay officials are only involved when there are orientations or reports to be made.

2. Dynamics in Water-Related Conflicts

2.1 Water Scarcity and Its Impact on Household Life

During the dry season, the daily struggle to secure culinary or even domestic water profoundly affects household life in Trinidad. Respondents described how the lack of accessible and affordable domestic water disrupts basic activities such as cooking, cleaning, and personal hygiene. In households without private wells or municipal connections, individuals must travel long distances or purchase expensive bottled water, placing an additional financial strain on already vulnerable families. Informant A said, *"If the wells dry up, including the distant wells, we are forced to buy mineral water, usually ranging from Php25.00 to Php35.00 per container (5 Gallons).* Other respondents revealed that they even reuse their domestic water during the dry season, the water they use for washing clothes is collected, so they can re-use it when using the restroom. Making more emphasis on the scarcity of culinary water, some informants revealed that they even experienced being unable to cook on time when there was no culinary water available, thus

eating late. Informant D indicated that their household experienced internal tension, particularly when family members assigned to fetch water from the dug well were subjected to blame from others for not being able to secure water for cooking.

2.2 Escalating Social Conflicts Over Water Access

A particularly alarming aspect of the culinary water crisis in Trinidad, Bohol, is the intensification of interpersonal conflicts. Informants recount instances where well owners enforce exclusive access by restricting water sharing. Some well owners physically remove water containers or make disparaging remarks toward those seeking access. Maria, not her real name, a resident of Hinlayagan Ilaya recounts that, *"Sometimes the well owner removes the containers, signaling that they no longer want others to fetch water. This has led to conflicts and strained relationships between neighbors"*. Mimi, a college student and active citizen in the community, added, *"While we were fetching water during the onset of the dry season, the well owner made sarcastic remarks about the water running out. Since then, our relationship has deteriorated, although the community helped build that well"*. According to Anonymous informant who is an active religious person, *"Some well owners refuse to share water or block access by installing pumps for their exclusive use."* Most informants admitted that these caused them downheartedness, but they also said that there was little they could do since it was not their dug well. These exclusionary practices escalate conflict, especially during the dry season when water is scarcest, creating tensions and damaging neighborly relationships.

Political ecology highlights that resource privatization and scarcity often intensify social conflicts (Peluso & Watts, 2001). In

Trinidad, the lack of affordable public water sources forces marginalized residents to depend on privately owned wells, leading to interpersonal disputes and heightened social tensions during the dry season.

2.3 Persistent Governance Inaction and Public Distrust

Another critical concern is the perceived indifference of local authorities. The absence of formal conflict resolution mechanisms exacerbates these disputes. With no intervention from barangay officials, informal retaliation and strained neighborly relations have become the norm. An informant said, *"The issue was just forgotten, it never reached the barangay level, and we just let it go. The conflict is forgotten and buried when the rainy season comes."* Another informant also highlighted that letting the conflict reach the barangay level would bring them more shame, as people will talk about them just because they are competing with the deep well owners in consuming the culinary water supply. Informants highlight how these conflicts have led to social fragmentation, as once-cooperative neighbors now view each other with suspicion and resentment. This breakdown of communal solidarity reflects a broader failure of governance to address fundamental resource inequalities. Informants describe public consultations as token gestures that provide no tangible solutions. One informant said, *"The problem is that officials only talk and do nothing"*; another respondent added, *"Officials seem more focused on personal interests rather than addressing community needs"* (Anonymous, a vendor and an active citizen).

It was equally alarming to note that when asked if there had been conflicts over water access in the community, the TWSO representatives answered:

> *"No, there are no direct conflicts, but residents do complain about the lack of supply in their water connection, and during that time, we explained about the scarce supply during the dry season and the rationing of water that we did as well to distribute equally"*

This is clear evidence that even the TWSO representatives are unaware of the conflicts and tensions occurring on the ground, particularly regarding the water scarcity issues faced by residents who rely heavily on dug wells, many of whom cannot afford to apply for a municipal water connection. This reflects the office's prioritization of the concerns of households connected to the municipal water system while overlooking or remaining unaware of the struggles faced by those dependent on dug wells. This administrative approach neglects the socio-political dimensions of water access, perpetuating a sense of systemic injustice. Informants increasingly view governance structures as unresponsive and self-serving, a perception that deepens the divide between the local government and the community.

These intertwined factors create a self-perpetuating cycle of conflict and distrust. Water-related disputes will likely intensify without meaningful intervention from local governance structures, further destabilizing community relations and undermining public confidence in local leadership. The case of barangays in Trinidad, Bohol, underscores the urgent need for inclusive governance and equitable water management. Addressing the root causes of these conflicts requires not only infrastructural improvements but also a shift toward transparent and community-centered decision-making processes. Without such reforms, the water crisis will continue exacerbating social inequalities and fuel unresolved tensions at the community level.

3. Water Governance Mechanism and the Deliberative Approaches in Conflict Resolution

3.1 Absence of Participatory Decision-Making

One key limitation of the current water governance system is the lack of participatory decision-making. Most of the respondents revealed that they did not experience public discussions about water management in their area, except for one respondent who experienced one public discussion, but the discussion was a mandatory orientation before water connection. A respondent said, *"I've attended an orientation meeting, which was a requirement before the installation of water connection; I'm not sure if it was effective, it was just an orientation".* This is further supported by the statements of the representatives of TWSO, when asked about deliberate approaches in conflict resolution, the representatives responded that they conduct orientations. One representative said, *"Yes, we have deliberative approaches, we conduct orientations before the installation".* This reveals a critical flaw in the current water governance system: the mistaken assumption that procedural orientations equate to participatory governance. While the TWSO representatives believe these orientations constitute deliberative approaches, they are limited to informing applicants rather than fostering genuine dialogue or public consultation. This lack of meaningful community participation not only alienates residents from decision-making but also perpetuates a governance model that is more bureaucratic than inclusive, further deepening public distrust.

Governance theory underscores the importance of participatory decision-making in fostering legitimacy and trust (Grote & Gbikpi, 2002). However, Trinidad's reliance on procedural

orientations instead of inclusive deliberation reflects a governance deficit that alienates community members and deepens public distrust. In the absence of deliberative and participatory platforms, grievances go unaddressed, and tensions escalate. Residents emphasize the need for inclusive decision-making processes that incorporate diverse voices and prioritize equitable outcomes. Without these mechanisms, community members remain disempowered, and conflicts over water access persist.

3.2 Weak Institutional Frameworks for Conflict Mediation

The findings also reveal weak institutional frameworks for conflict mediation. While several respondents admitted feeling ashamed if water-related conflicts escalated to the barangay level due to fear of being the subject of public gossip, one respondent disclosed that her conflict with neighbors over water access had been brought to the attention of barangay officials. She stated, *"We brought the issue to the barangay, but until now, it hasn't been resolved. We still hold grudges. The barangay mediated but never resolved the issue. All they did was make empty promises. The barangay just told us to "be neighborly."* Barangay officials lack clear institutional frameworks for conflict mediation and even resources to address water-related disputes effectively. Respondents recount how attempts to report conflicts are often met with indifference or deflection. This failure to provide structured mediation reinforces the cycle of unresolved disputes and fosters community-level resentment.

4. Rethinking Sustainable and Inclusive Water Governance

4.1 Toward Deliberative and Equitable Water Management

Addressing the water crisis in Trinidad requires a fundamental shift toward collaborative and equitable water management anchored in deliberative and participatory governance. Key informants consistently advocate for community-based governance models where residents actively engage in discussions and decision-making. This deliberative approach fosters transparency, collective problem-solving, and social cohesion by ensuring that diverse voices, particularly those from marginalized sectors, are heard and valued (Curato, 2021; Fischer, 2003; Hajer & Wagenaar, 2003). However, findings reveal a glaring absence of genuine public consultations. While some informants acknowledged attending mandatory orientations before water connection, these sessions were described as one-way information dissemination rather than opportunities for open dialogue. One informant noted, *"The orientation was just about the rules for water connection. There was no space to talk about our problems or suggest changes"* (Anonymous informant, an active religious person). This highlights the disconnect between official claims of participatory governance and the reality of limited community involvement. Establishing deliberative forums where residents can articulate their concerns, negotiate solutions, and participate in shaping water policies is essential for fostering a more inclusive and responsive governance framework (Godden & Ison, 2019).

Moreover, equitable water management involves reframing water access as a public right rather than a market commodity, a principle many respondents strongly support. The current governance system, characterized by privatized delivery models and high user fees,

disproportionately affects low-income households. Several informants expressed concerns that the financial barriers to water access exacerbate existing inequalities and prevent those most in need from securing a basic resource. An informant stated, *"I don't think it's fair because the monthly fee is too expensive - we could already buy rice with that amount, and we still have to buy hoses"* (Anonymous informant, a college student and an active citizen); another added, *"There are too many requirements before you can get a water connection, and the hose is expensive. Plus, there's a monthly payment"* (Anonymous informant, a vendor and an active citizen).

To address these structural inequities, there is a need for policy reforms that ensure affordable access while embedding deliberative mechanisms into water governance. This could involve regular public consultations, citizen-led water boards, and accessible grievance channels where community members can voice their concerns and co-create solutions. By institutionalizing deliberative processes, Trinidad can work toward a sustainable, equitable, and community-centered water governance model - one that not only resolves current disputes but also prevents future conflicts by fostering mutual accountability and shared decision-making. This shift toward deliberative governance, where community members actively shape water policies, is crucial for sustainable conflict resolution. Governance theory suggests empowering local actors through participatory platforms can bridge the governance gap and foster inclusive decision-making processes (Fischer, 2012).

4.2 Strengthening Local Capacities for Governance

Building local governance capacity is essential for long-term conflict prevention and equitable water management. Informants

consistently emphasized the need for barangay-level training programs focused on conflict mediation, resource management, and participatory decision-making. Many residents expressed frustration over the perceived inaction of barangay officials, noting that their concerns regarding water disputes were often dismissed or inadequately addressed. Informant C said, *"When we complain to the barangay, nothing really happens. They just tell us to settle it ourselves."* This lack of intervention highlights the urgent need to equip barangay officials with the skills and resources to mediate conflicts effectively.

Beyond training programs, community-driven initiatives can empower residents and foster a more inclusive governance framework. Informants suggested forming community water councils to provide a platform for dialogue and collective decision-making. Moreover, a shift from mere procedural orientations to genuine public consultations is necessary to ensure community voices shape water governance policies. Informant C observed and stated, *"The only time I attended a public meeting was the orientation before our water connection, there was no real discussion, just instructions."* By investing in these initiatives and empowering local governance structures, Trinidad can transition toward a sustainable and participatory water governance model that addresses both the material inequalities in water access and the social tensions arising from these disparities.

Conclusion

The analysis of water security and local conflicts in Trinidad, Bohol, reveals a complex interplay between resource scarcity, governance frameworks, and socio-economic factors. The case

illustrates that while it has been proven that water resources can instigate conflict, participatory approaches and models are potential elements of peaceful dialogue through a collective consensus and sense of ownership of the process among community stakeholders. Resource-based disputes, particularly water, highlight the vulnerabilities inherent in fragmented management systems and inconsistent and weak policy enforcement. Addressing these challenges requires a multi-stakeholder framework highlighting the necessity of adopting participatory and deliberative governance approaches to ensure more inclusive decision-making processes. This approach can reduce the likelihood of disputes by promoting fairness, transparency, and collective accountability. To mitigate future conflicts, there is a pressing need to implement equitable water allocation mechanisms, strengthen institutional capacity, and improve transparency in governance processes. Ultimately, resolving water-related conflicts and tension require not only technical solutions, but also social and political interventions that prioritize fairness and long-term resource sustainability.

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