



Sustainable Fishing Practices vs. Illegal Fishing

Social and Economic Perspectives from Coastal
Communities in Sri Lanka's Southern Province

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Degree project/Independent Project • 30 credits
Swedish University of Agricultural Sciences, SLU
Faculty of Natural Resources and Agricultural Sciences
Environmental Communication and Management - Master's programme
Uppsala 2025



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Social and Economic Perspectives from Coastal Communities in Sri Lanka's Southern Province

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Credits:	30 credits
Level:	Second cycle, A2E
Course title:	Master thesis in Environmental science, A2E
Course code:	EX0897
Programme/education:	Environmental Communication and Management - Master's Programme
Course coordinating dept:	Department of Aquatic Sciences and Assessment
Place of publication:	Uppsala
Year of publication:	2025
Cover picture:	The image captures a group of Sri Lankan fishermen working together to pull a traditional fishing boat ashore. Their teamwork reflects the strong sense of community in coastal fishing villages, where livelihoods depend on the sea despite ongoing challenges like economic hardships and sustainability concerns. Photo by the author. Online publication: https://srilanka.un.org
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Online publication:	https://stud.epsilon.slu.se
Keywords:	Sustainable Fishing, Illegal Fishing, Coastal Communities, Marine Conservation, Economic Livelihoods, Environmental Communication, Community Engagement, Knowledge Sharing

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Abstract

Illegal fishing poses significant challenges to marine sustainability and coastal livelihoods in Sri Lanka's Southern Province. While regulatory frameworks exist, enforcement remains weak, and community participation in fisheries management is limited. This study explores how communication strategies, trust, and governance influence compliance with sustainable fishing practices, focusing on the perspectives of small-scale fishers and institutional actors. Using a qualitative approach, the study conducted ten semi-structured interviews with key stakeholders, including fishers, local officials, marine police, and industry representatives. Data were analyzed through manual thematic analysis, supported by secondary sources conducted with the assistance of local collaborators. Five major themes emerged: economic pressures driving illegal fishing, weakened community trust and collective action, poor governance and enforcement, barriers to adopting sustainable practices, and the link between fisheries and other industries such as tourism. While participants recognized the ecological consequences of illegal fishing, economic instability, limited enforcement, and political influence hindered compliance. Power imbalances favoured large-scale operators, while small-scale fishers faced systemic disadvantages and exclusion from decision-making. The study highlights the need for stronger community-based governance, improved enforcement, economic alternatives, and inclusive communication strategies. Collaborative partnerships between fishing communities, government, and industries like tourism could create new incentives for sustainability. The findings suggest that addressing illegal fishing requires not only policy reform but also investment in trust-building, livelihood diversification, and local empowerment.

Keywords: Sustainable Fishing, Illegal Fishing, Coastal Communities, Marine Conservation, Economic Livelihoods, Environmental Communication, Community Engagement, Knowledge Sharing

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Abbreviations

Abbreviation	Description
AFMA	Australian Fisheries Management Authority
CBFM	Community-based fisheries management
IUU	Illegal, unreported, and unregulated
MPA	Marine Protected Areas
CAT	Collective Action Theory

1. Introduction

1.1 Illegal Fishing in Sri Lanka

Illegal fishing remains a serious challenge in Sri Lanka, causing significant harm to marine resources and threatening the livelihoods of fishing communities (Dodangodage 2017). Studies indicate that illegal fishing is widespread in both inland and coastal waters, with many fishers violating regulations due to economic necessity and weak enforcement mechanisms. Wickremasinghe et al. (2018) examined illegal fishing activities in three major reservoirs, Victoria, Sorabora, and Ulhitiya, finding that non-compliance with regulations was common. Their study highlighted that many fishers' resorts to illegal methods because of financial difficulties and a lack of awareness regarding conservation laws. Additionally, foreign fishing vessels, particularly from India, frequently encroach upon Sri Lankan waters, using banned bottom-trawling techniques. These activities not only lead to severe depletion of marine stocks but also cause diplomatic tensions between the two countries.

Despite the existence of legal frameworks such as the Fisheries and Aquatic Resources Act No. 2 of 1996, enforcement remains weak and inconsistent. Kularatne (2020) explains that while penalties exist for illegal fishing, they are not strictly enforced, allowing violations to continue with minimal consequences. Moreover, gaps in regulations, such as the lack of specific penalties for using illegal fishing gear, create loopholes that allow destructive practices to persist. Many small-scale fishers also lack alternative income sources, making them more likely to engage in unsustainable fishing methods to survive (Chapsos & Hamilton 2019). According to existing literature, without stronger monitoring systems, increased government oversight, and better economic incentives for legal fishing, addressing illegal fishing in Sri Lanka is likely to remain a significant challenge (Chapsos & Hamilton 2019).

1.2 The Socio-Economic Role of Fisheries in Sri Lanka

Fisheries play an essential role in Sri Lanka's economy, providing a primary source of income and food security for thousands of coastal communities. The small-scale fisheries sector is vital to the livelihoods of many families, supporting employment and local trade. According to Ibrahim (2020), this sector significantly contributes to economic stability and helps sustain coastal populations. However, various challenges, including illegal fishing, declining fish stocks, and weak governance, threaten its sustainability. Many fishers depend on traditional fishing methods, but economic pressures often force them to adopt

unsustainable practices (Dayalatha 2020). Government policies have attempted to regulate the industry, yet enforcement remains inconsistent, making it difficult to maintain a balance between economic survival and environmental protection (Nishanthan et al. 2019).

Beyond economic challenges, social inequalities shape the fishing sector, particularly in access to resources and decision-making power. Udayanga & Sandaruwan (2020) highlight that marginalized fishers often struggle to secure stable livelihoods, as wealthier groups dominate access to modern fishing equipment, better markets, and government support. Additionally, social factors such as gender, caste, and class divisions influence participation in fisheries management. Lokuge & Hilhorst (2017) discuss how women, despite playing significant roles in fish processing and trade, are often excluded from leadership positions and institutional decision-making.

1.3 Economic Pressures and Livelihoods

Economic hardship remains one of the primary drivers of unsustainable fishing practices in Sri Lanka. Many small-scale fishers struggle with low incomes, rising costs, and market uncertainties, forcing them to engage in illegal or overfishing activities for short-term survival. Wijayaratne & Gudmundsson (2001) explain that historical fisheries policies in Sri Lanka have focused more on increasing fish production rather than long-term resource sustainability. As a result, advanced fishing technology has become more prevalent, benefiting large-scale operators while placing small-scale fishers at a disadvantage (Rathnachandra & Malkanthi 2024). Without access to modern boats, efficient gear, or financial support, many small fishers are unable to compete, making them more vulnerable to poverty and economic instability (Rathnachandra & Malkanthi 2024). The growing gap between small-scale and large-scale fisheries has created tensions within the sector, often leading to conflicts over fishing grounds, access rights, and market control (Lloret et al. 2018). Large-scale operators, with their capital-intensive techniques and government backing, dominate export markets, leaving small-scale fishers struggling to secure fair prices for their catch (Lloret et al. 2018). The lack of alternative livelihood options further worsens the situation, as many coastal communities depend entirely on fishing for survival. Without proper economic interventions, such as subsidies for sustainable fishing or skills training for alternative employment, many small fishers feel they have no choice but to engage in unsustainable or illegal fishing practices to meet their daily needs (Tietze 2016).

1.4 Objective and Research Questions

Illegal fishing in Sri Lanka's Southern Province remains a critical issue, with profound social, economic, and environmental consequences. This study aims to examine the role of communication strategies in addressing illegal fishing, with an emphasis on community engagement, regulatory enforcement, and the effectiveness of awareness initiatives. While previous research has analyzed the environmental impacts of illegal fishing, there is a gap in understanding how communication, participation, and trust-building within fishing communities influence compliance and resistance to sustainable fishing regulations. By integrating the perspectives of fishers, policymakers, and regulatory authorities, this study explores how information is shared, misinterpreted, or disregarded in the context of fisheries governance.

The study is guided by the following objectives,

- To investigate how communication strategies influence perceptions and behaviours related to illegal fishing and sustainable practices in Sri Lanka's coastal communities.
- To assess the role of social networks, trust, and collective action in encouraging compliance with sustainable fishing regulations.
- To analyze the effectiveness of community-led enforcement mechanisms and informal regulations in mitigating illegal fishing.
- To explore the challenges in governmental and community-based communication efforts regarding fisheries management.

Based on these objectives, the study seeks to answer the following research questions,

- How do coastal communities perceive illegal fishing, and how does communication shape their understanding of its social, economic, and environmental impact?
- What role does social cohesion and trust play in shaping collective responses to illegal fishing?
- What are the key challenges in government and community communication on fisheries management?

1.5 Focus of the Study

This study focuses on the social and economic dimensions of illegal fishing in Sri Lanka's Southern Province, with a particular emphasis on the role of communication in fisheries management. While previous research has highlighted the ecological consequences of overfishing and destructive practices, this study

prioritizes the human and institutional factors that enable or challenge sustainable fisheries management. It explores how information about fishing regulations, enforcement measures, and sustainability initiatives is communicated and perceived within local communities.

A key aspect of this research is understanding the perspectives of different stakeholders, including small-scale and large-scale fishers, fishing unions, government officials, and law enforcement agencies. It examines how these groups engage in communication regarding fisheries policies, either through formal channels such as government directives or informal networks within fishing communities. Additionally, the study investigates how miscommunication, misinformation, and lack of access to regulatory knowledge contribute to non-compliance and resistance to sustainable fishing practices.

The research also critically evaluates the effectiveness of community-driven initiatives in preventing illegal fishing. By analysing community-based governance models, the study explores whether localized enforcement measures, such as peer monitoring and cooperative regulations, are effective in reducing illegal activities. Furthermore, it assesses whether top-down enforcement mechanisms, such as penalties and surveillance, foster compliance or create tensions between authorities and local fishers. By framing illegal fishing as an issue of environmental communication and governance, this study contributes to a broader understanding of how policies can be better designed and implemented to align with the socio-economic realities of coastal communities.

1.6 Structure of the Study

This study comprises six chapters that collectively explore the dynamics between illegal fishing, sustainable practices, and socio-economic challenges in Sri Lanka's coastal communities.

- Chapter 1 introduces the research problem, its significance, and outlines the objectives and key research questions.
- Chapter 2 provides a literature review, summarizing current studies on illegal fishing, sustainable fisheries management, and community governance, while identifying knowledge gaps.
- Chapter 3 presents the theoretical frameworks, including political ecology and collective action theory, which guide the interpretation of power relations, governance, and collaboration in fisheries practices.
- Chapter 4 explains the research methodology, detailing the qualitative approach, data collection methods, and site and participant selection.

- Chapter 5 analyzes and discusses the study's findings, linking participant insights to the research questions and theoretical lens.
- Chapter 6 concludes the study, offering key insights, policy implications, and recommendations for future research.

2. Illegal Fishing and the Sustainability of Marine Resources

2.1 Illegal Fishing on Marine Resources

The long-term consequences of illegal fishing are devastating for marine ecosystems, as it leads to the overexploitation of fish stocks, habitat destruction, and biodiversity loss. This issue is particularly severe in the Palk Strait, where frequent cross-border fishing violations by Indian trawlers have caused extensive damage to Sri Lankan marine resources (Sivaramanan 2015). Overfishing, combined with the use of destructive gear such as bottom trawlers and fine-meshed nets, reduces fish populations at an unsustainable rate. Additionally, unregulated fishing practices result in the accidental capture of juvenile fish and endangered species, further destabilizing marine ecosystems (Lindley et al. 2019). The lack of effective monitoring and enforcement mechanisms allows these activities to persist, exacerbating the problem.

Beyond environmental concerns, illegal fishing also has severe socio-economic consequences for Sri Lankan coastal communities. Many local fishers, particularly in the Northern Province, struggle to compete with illegal operators who exploit marine resources without facing legal repercussions (Scholtens 2016). This creates a cycle where legitimate fishers suffer economic hardships, as their fishing grounds become less productive due to depleted stocks. Weak governance and ineffective bilateral agreements between Sri Lanka and India further complicate the issue, as cross-border disputes remain unresolved. Additionally, political influences and corruption often hinder meaningful action against illegal fishing, leaving local communities vulnerable to economic instability and loss of livelihood opportunities (Tiaradipa & Hidayatullah 2024).

2.2 Illegal Fishing and Its Impact on Coastal Communities in Sri Lanka

Illegal, unreported, and unregulated (IUU) fishing remains a severe threat to Sri Lanka's coastal communities, disrupting both economic stability and marine resource sustainability. Small-scale fishers, who depend on legal and regulated fishing practices, face increasing challenges due to the uncontrolled exploitation of marine stocks (Peramunagama & Ramanathan 2021). This issue is particularly visible in the Northern Province, where fishers struggle against both local illegal operators and foreign trawlers, mainly from India. Many violators use destructive

fishing methods, such as bottom trawling, despite strict laws prohibiting these practices. However, weak law enforcement allows these activities to persist, leading to rapid resource depletion and loss of income for coastal communities. Without proper intervention, Sri Lanka's fishing sector remains vulnerable to both internal exploitation and external pressure from neighbouring countries.

One of the most contentious issues is the frequent encroachment of Indian fishing vessels into Sri Lankan waters. Kularatne (2020) highlights that Indian trawlers often practice bottom trawling, a method banned in Sri Lanka due to its destructive impact on marine ecosystems. This leads to habitat destruction, loss of breeding grounds, and a decline in fish stocks, forcing local fishers to travel further out to sea in search of a catch. Additionally, the ongoing geopolitical tensions between India and Sri Lanka over fishing rights create diplomatic challenges in resolving the issue effectively (Ibrahim 2020). Without regional cooperation and stricter bilateral agreements, illegal fishing will continue to undermine the livelihoods of Sri Lankan coastal communities and destabilize the local fishing economy.

2.3 Challenges in Sustainable Fishing Practices

Sustainable fishing efforts in Sri Lanka face multiple challenges, ranging from economic pressures and weak enforcement to inadequate community participation. While the government and conservation groups have introduced sustainability initiatives, such as marine protected areas and seasonal fishing bans, their effectiveness remains limited due to poor enforcement (Sumaila et al. 2016a). The fisheries sector is also highly sensitive to policy changes, fluctuations in global seafood demand, and regional trade agreements. Ibrahim (2020) explains that Sri Lanka's post-war economic policies have placed additional stress on small-scale fishers, making it difficult for them to adopt sustainable fishing practices. Additionally, large-scale operators benefit more from government support and access to international markets, while small fishers struggle with outdated equipment and insufficient financial aid.

In some fishing communities, social hierarchies further complicate access to sustainable fishing resources. Udayanga & Sandaruwan (2020) explains that in Rekawa, socio-economic factors, such as income disparities and community influence, determine who benefits from marine resources. Those with greater economic and political power often gain preferential access to fishing permits, modern boats, and subsidies, while marginalized fishers remain dependent on traditional methods with little support. Similarly, gender disparities play a role, with women being largely excluded from decision-making processes in the

fisheries sector (Singh et al. 2018). This suggests that addressing environmental concerns alone is not enough, for sustainable fishing to be effective, policies must also focus on reducing social inequalities and ensuring fair resource distribution within fishing communities.

Sustainable fishing aims to balance economic survival with the long-term health of marine ecosystems, ensuring that fish stocks are not depleted beyond recovery (Sowman & Sunde 2018). However, small-scale fishers in Sri Lanka face significant challenges in adopting sustainable fishing methods due to financial instability, lack of access to modern fishing technology, and limited government support (McKinley et al. 2020). Many small-scale fishermen rely on traditional fishing techniques, which are often less destructive but also less economically competitive compared to large-scale commercial operations. Scholtens (2016) argue that legal pluralism in transboundary fisheries governance further complicates sustainable fishing efforts, as conflicts often arise between formal regulations and informal fishing practices observed within different communities. Without a clear and consistent legal framework, efforts to promote sustainability remain ineffective.

One widely proposed solution to conserve marine resources is the implementation of Marine Protected Areas (MPAs). These zones are designed to restrict overfishing and allow fish populations to regenerate, contributing to long-term sustainability. However, studies indicate that MPAs in Sri Lanka are not always effectively enforced, reducing their impact on conservation efforts (Koralagama 2022). The Fisheries and Aquatic Resources Act provides a legal basis for protecting marine ecosystems, yet gaps in policy implementation often allow unsustainable fishing to continue unchecked. Marine protected areas (MPAs) are a global conservation and management tool to enhance the resilience of linked social-ecological systems with the aim of conserving biodiversity and providing ecosystem services for sustainable use. However, MPAs implemented worldwide include a large variety of zoning and management schemes from single to multiple-zoning and from no-take to multiple-use areas. The current IUCN categorisation of MPAs is based on management objectives which many times have a significant mismatch to regulations causing a strong uncertainty when evaluating global MPAs effectiveness. A novel global classification system for MPAs based on regulations of uses as an alternative or complementing the current IUCN system of categories is presented. Scores for uses weighted by their potential impact on biodiversity were built. Each zone within a MPA was scored and an MPA index integrates the zone scores. This system classifies MPAs as well as each MPA zone individually, is globally applicable and unambiguously discriminates the impacts of uses Horta E Costa et al. (2016) propose a

classification system for MPAs, which could help strengthen biodiversity protection if adapted to Sri Lanka's context. However, for MPAs to be truly effective, they must be accompanied by strong enforcement, community involvement, and incentives that encourage compliance among fishers.

2.4 Sustainability and Conservation Efforts

Sri Lanka has introduced various measures to promote sustainable fishing, including seasonal fishing bans, gear restrictions, and marine protected areas (MPAs). These strategies are intended to prevent overfishing, protect spawning fish, and allow marine ecosystems to recover (Jones et al. 2018). However, the success of these initiatives depends on strong enforcement and active community participation, both of which remain inconsistent across different regions. Some communities have successfully implemented sustainable practices, while others struggle due to economic pressures, lack of awareness, and insufficient regulatory support. Studies highlight that MPAs have the potential to protect fish stocks, but their effectiveness is often undermined by weak governance and limited monitoring mechanisms (Tanna et al. 2021). Without proper enforcement, illegal fishing continues, diminishing the positive impact of these conservation zones.

A promising approach to enhancing fisheries sustainability is co-management, where government authorities collaborate with local fishing communities. This model allows fishers to take an active role in resource management, increasing compliance with regulations while also addressing socio-economic challenges (Udayanga & Sandaruwan 2020). Research on coastal fisheries management in Sri Lanka indicates that strategies such as licensing, community-led monitoring, and targeted training programs have helped reduce illegal fishing in certain regions. However, for co-management to be effective on a larger scale, it requires long-term commitment, stable funding, and consistent enforcement (Peramunagama & Ramanathan 2021). Without sustained efforts, these initiatives risk losing momentum, leading to continued overfishing and resource depletion.

2.5 The Role of Community Engagement in Fisheries Management

Community involvement plays a crucial role in managing fisheries and reducing illegal fishing practices. Many fishing cooperatives and unions in Sri Lanka have attempted to enforce sustainable fishing rules, but their efforts are often limited by a lack of legal authority and financial support (Wijayaratne & Gudmundsson 2001). Some communities have established local monitoring programs, which have successfully reduced illegal fishing in specific areas. However, these efforts

struggle to remain effective over time unless there is consistent collaboration with government agencies (Dodangodage 2017). Without formal backing, community-led initiatives may lose momentum, making it difficult for fishers to ensure long-term sustainability. Additionally, external factors such as political influence, economic pressures, and conflicting interests within fishing communities can hinder collective action.

Trust and social capital among fishers are also key factors in strengthening community-based fisheries management. Trust facilitates information sharing, reduces conflict, and enables long-term collaboration, particularly when formal governance structures are weak. As Grønlie (2013) highlights, strong social networks encourage cooperation among fishers, allowing them to self-regulate and promote sustainable fishing practices. However, when divisions exist within communities, such as conflicts between small-scale and large-scale fishers, the effectiveness of collective efforts weakens (Collins et al. 2021). Another overlooked factor in fisheries management is gender representation (Wickramasinghe & Bavinck 2015). Women play a vital role in the fishing industry, particularly in processing, selling, and managing fishing-related businesses, yet they are often excluded from decision-making processes. Recognizing and incorporating women's contributions into fisheries governance could enhance sustainability efforts and strengthen community resilience (Koralagama 2022).

2.6 Community-Based Fisheries Management

Community-based fisheries management (CBFM) has been widely recognized as an effective approach to ensuring sustainable fishing practices. Many studies emphasize that local fishers, when given proper resources and decision-making power, can contribute significantly to regulating fisheries. One successful example is the Godawaya Fisheries Cooperative Society, where local fishers partnered with the government to reduce destructive fishing practices, such as dynamite fishing (Wickramasinghe & Bavinck 2015). This cooperative effort demonstrates that a hybrid governance model, where both the state and fishing communities work together, can lead to better fisheries management outcomes. However, while some community-led programs have been effective, others face challenges due to weak enforcement, insufficient funding, and lack of local leadership.

Not all fishing cooperatives function effectively, as their priorities and focus areas vary across different regions. Some cooperatives prioritize financial growth over sustainable fishing practices, which can lead to conflicting objectives within the

same community. Additionally, government policies often fail to provide consistent guidance and long-term support for local cooperatives, leading to unstable management structures. Research suggests that for community-based fisheries management to be successful in Sri Lanka, stronger institutional support, financial assistance, and leadership development programs are necessary resilience (Koralagama 2022). Ensuring that both local and national governments recognize the importance of cooperative fisheries management could help build a more resilient and sustainable fishing industry.

2.7 Policy Recommendations and Community-Based Solutions

Addressing illegal fishing and promoting sustainable practices require active community participation and strong policy interventions. Studies suggest that community-based approaches and collective action play a critical role in fisheries governance. Cooperatives and unions serve as important platforms for fishers, allowing them to advocate for their rights and participate in decision-making (Kularatne, 2020). However, these initiatives often exclude marginalized groups, such as women and small-scale fishers, which limits their effectiveness (Lokuge & Hilhorst 2017). To create a more inclusive and effective fisheries management system, policies should focus on financial support, capacity building, and governance improvements. Ekanayake & Galdolage (2024) propose investing in eco-friendly fishing techniques and technology adoption, which can enhance compliance with sustainability standards and reduce reliance on harmful fishing methods.

Cross-border fishing conflicts between Sri Lanka and India further complicate efforts to regulate fisheries and prevent resource depletion. Sivaramanan (2015) stresses the importance of international cooperation, particularly in resolving disputes overfishing territories. Diplomatic efforts and joint regulatory mechanisms could help mitigate tensions and ensure fair access to marine resources. Additionally, restorative solutions, such as coral reef restoration and the creation of marine protected areas, have been proposed as long-term strategies to replenish fish stocks and protect biodiversity. By combining local participation with regional policy coordination, Sri Lanka can develop a more resilient and sustainable fishing industry that benefits both coastal communities and marine ecosystems.

2.8 Legal Framework and Policy Challenges

Sri Lanka has established several policies to regulate fisheries, but their effectiveness is often weakened by poor enforcement and governance gaps. The Fisheries and Aquatic Resources Act of 1996 remains the primary legal framework governing the sector, yet studies indicate that it lacks specific guidelines on how fisheries committees should function. This has led to inconsistent enforcement across different regions, making it difficult for authorities to monitor illegal activities effectively (Colombage 2019). In addition, bureaucratic inefficiencies, and lack of coordination between government agencies have further complicated fisheries management efforts. To enhance the effectiveness of existing policies, experts recommend strengthening institutional capacity, improving surveillance measures, and ensuring stricter penalties for violations (Ibrahim 2020).

A major policy challenge in Sri Lanka's fisheries sector is the ongoing conflict over fishing rights, particularly with Indian fishers. Bottom trawling, which is banned in Sri Lanka, is still widely practiced by Indian trawlers operating in Sri Lankan waters (Nishanthan et al. 2019). This not only damages marine habitats but also creates tensions between fishing communities in both countries. Despite existing legal restrictions, weak enforcement has allowed this issue to persist. Experts argue that bilateral agreements, enhanced monitoring systems, and stricter penalties for illegal fishing could help address these challenges (Rathnachandra & Malkanthi 2024). By implementing effective governance structures and ensuring better compliance with fisheries regulations, Sri Lanka can work toward protecting its marine resources while securing the livelihoods of its fishing communities.

2.9 Policy and Governance in Fisheries Regulation

Over the years, Sri Lanka has introduced several regulations to manage its fisheries sector, yet enforcement remains inconsistent. The Fisheries and Aquatic Resources Act of 1996 serves as the primary legal framework for governing marine resources, but gaps in implementation continue to hinder its effectiveness (De Silva et al. 2023). Research by Dodangodage (2017) highlights that political interference and corruptions have significantly weakened enforcement, allowing illegal fishing practices to persist. In some cases, local authorities lack the resources to monitor and penalize violators, while in others, political connections shield offenders from accountability. Additionally, overlapping responsibilities among government agencies lead to delays in decision-making, making fisheries management inefficient and fragmented.

To address these governance challenges, researchers suggest adopting best practices from international fisheries management models. For instance, the Australian Fisheries Management Authority (AFMA) has successfully implemented satellite tracking and electronic monitoring systems to detect and prevent illegal fishing activities. Such technologies could be adapted in Sri Lanka to improve real-time surveillance of fishing vessels and enhance regulatory enforcement (Wickremasinghe et al. 2018). Furthermore, introducing stricter penalties for illegal activities, combined with improved legal frameworks, could strengthen compliance, and discourage unsustainable fishing practices. A well-structured governance system that integrates modern monitoring tools with transparent policy enforcement is essential to ensuring the long-term sustainability of Sri Lanka's fisheries sector.

3. Theories & Concepts

Understanding the complexities of illegal fishing and sustainable fisheries management requires a strong theoretical foundation. This study applies the Political Ecology Framework and Collective Action Theory to examine how socio-political factors influence fishing communities and their ability to engage in sustainable practices. These frameworks help analyze power structures, governance mechanisms, and community-driven efforts to address illegal fishing. By integrating these perspectives, this research provides insight into the dynamics of fisheries governance, the role of policy and regulation, and the effectiveness of collective efforts in managing marine resources.

3.1 Political Ecology Framework

Political Ecology provides a critical lens for understanding the relationship between environmental challenges and socio-political structures. It moves beyond traditional ecological perspectives, which primarily attribute environmental degradation to human overuse, and instead examines how broader economic, political, and institutional factors influence environmental governance and access to resources (Nost & Goldstein 2022). By exploring issues such as power dynamics, inequality, and governance failures, Political Ecology offers a holistic approach to analyzing how environmental problems, such as illegal fishing, are deeply intertwined with larger socio-economic systems. This framework is particularly relevant in contexts where resource management decisions are shaped by competing interests between state actors, local communities, and commercial enterprises (Bouzarovski 2022).

Political Ecology is rooted in the idea that environmental problems are not just ecological concerns but are shaped by historical and political processes (Sovacool 2021). These processes influence how natural resources are controlled, distributed, and contested among different stakeholders. In fisheries management, this perspective helps explain why some communities have access to sustainable fishing resources, while others are marginalized due to economic inequalities and governance failures (Sultana 2021). The framework also critiques the top-down enforcement of conservation policies, arguing that many environmental regulations are imposed without considering the socio-economic realities of local communities (Benjaminsen & Svarstad 2021). Such policies often

disproportionately affect small-scale fishers, who may be forced into illegal fishing due to economic necessity and lack of viable alternatives.

3.1.1 Political Ecology in Fisheries Management

Applying Political Ecology to fisheries governance provides valuable insights into the complex interactions between environmental policies, market forces, and local livelihoods (Nustad & Swanson 2022). Many fisheries management strategies focus on conservation without considering the social and economic challenges faced by fishing communities. Political Ecology challenges this approach by emphasizing that fishers operate within systems influenced by national policies, trade agreements, and global seafood markets (Gómez & Maynou 2021). These external pressures often dictate whether small-scale fishers can compete with large-scale commercial fishing operations, which typically receive more government support and have greater market access.

In Sri Lanka, for instance, small-scale fishers face multiple challenges due to weak enforcement mechanisms, competition from foreign trawlers, and policies that favor commercial fishing industries (Scholtens 2016). Political Ecology explains how these structural issues create an environment where illegal fishing becomes a survival strategy for many local fishers. Governance failures, including corruption, lack of enforcement, and the exclusion of local communities from decision-making processes, further contribute to unsustainable fishing practices (Orach & Schlüter 2021). Additionally, cross-border fishing conflicts, such as the tensions between Sri Lankan and Indian fishers, demonstrate how resource management is often influenced by international political and economic relations rather than by local conservation priorities (Sivaramanan 2015).

3.1.2 Power Dynamics and Resources Access in Fisheries

A central theme in Political Ecology is the unequal distribution of power and resources, which directly impacts access to marine fisheries. In Sri Lanka, small-scale fishers often find themselves at a disadvantage compared to large-scale commercial fishing enterprises. These larger operations benefit from state policies, advanced technologies, and privileged access to international markets, allowing them to dominate the fisheries sector (Ertör 2023). In contrast, small-scale fishers struggle with outdated fishing equipment, limited financial resources, and restrictive policies that hinder their ability to compete. Regulatory frameworks such as licensing requirements, fishing quotas, and marine zoning laws tend to favor well-funded commercial enterprises, while marginalized fishing communities face bureaucratic hurdles and limited governmental support.

(Giron-Nava et al. 2021). These disparities in access contribute to economic instability among traditional fishing communities, making them more vulnerable to engaging in illegal, unreported, and unregulated (IUU) fishing as a means of survival.

The cross-border fishing conflict between Sri Lankan fishers and foreign trawlers, particularly those from India, further highlights these power imbalances. Many Sri Lankan small-scale fishers lose access to their traditional fishing grounds due to illegal encroachments by Indian trawlers, which practice destructive bottom-trawling methods that deplete fish stocks and damage marine habitats (Kularatne 2020). Weak bilateral agreements and ineffective enforcement mechanisms allow these conflicts to persist, with small-scale Sri Lankan fishers bearing the brunt of resource depletion while having limited political power to challenge these violations.

3.1.3 Governance Failures and Policy Inconsistencies

The role of governance in fisheries management is critical in determining how marine resources are accessed and utilized. However, policy inconsistencies and governance failures have significantly contributed to inequities in the fisheries sector. In many cases, government policies are structured to favour large-scale commercial fishing enterprises, which generate higher economic returns through exports and large-scale fisheries investments (Scholtens, 2016). Licensing systems, fishing quotas, and marine spatial planning regulations tend to grant greater privileges to industrial fisheries, while small-scale fishers face bureaucratic hurdles, inadequate financial support, and limited representation in policy-making processes (Mangubhai et al. 2021). This unequal policy landscape has resulted in a scenario where commercial fishers gain access to better technology, financial subsidies, and market opportunities, while small-scale fishers struggle to sustain their livelihoods.

The political economy of fisheries governance further reinforces this disparity. Corruption and political lobbying by powerful commercial fishing enterprises often result in policies that prioritize short-term economic gains over long-term sustainability (Scholtens 2016). Large-scale operators, backed by wealthy investors and political connections, can influence policy decisions to secure favorable conditions, often at the expense of local fishing communities. This dynamic has led to resource overexploitation and regulatory loopholes, where industrial fisheries enjoy looser restrictions, while small-scale fishers face tighter enforcement of sustainability rules (Udayanga & Sandaruwan 2020). Consequently, many small-scale fishers are caught between economic necessity

and restrictive regulations, leading some to resort to illegal, unreported fishing as a survival strategy.

3.1.4 Marine Protected Areas and Conservation Challenges

While international conservation efforts and sustainability initiatives aim to protect marine ecosystems, they often fail to account for the socio-economic realities of small-scale fishers. The establishment of Marine Protected Areas (MPAs) has been a common strategy for biodiversity conservation and fisheries management, yet its implementation has not always been inclusive of local communities (Friedlander & Gaymer 2021). Many MPAs are established without sufficient consultation with affected fishers, leading to restrictions on fishing rights and a loss of traditional livelihoods. This lack of participatory governance in fisheries conservation measures can further marginalize fishing communities, reinforcing economic inequalities and social unrest (Jones & Long 2021).

Despite their ecological benefits, MPAs do not always achieve their intended conservation goals due to weak enforcement mechanisms. Illegal fishing continues both within and outside these protected areas, often involving politically connected actors who evade regulation. Small-scale fishers, on the other hand, face stricter enforcement, despite their relatively low ecological impact compared to industrial fisheries (Picone et al. 2021). This imbalance in the enforcement of sustainability policies further demonstrates how governance structures often favour wealthier stakeholders, leaving vulnerable fishing communities to bear the economic burden of conservation efforts.

3.1.5 Global Economic Pressures and Resource Depletion

Beyond national policies, global economic forces also shape local fishing practices, exacerbating governance failures and resource access inequalities. The expansion of international seafood markets and rising global demand for marine products has intensified commercial fishing activities, often beyond sustainable levels (Eisenbarth 2022). Large-scale fishing companies, with access to export markets and advanced technologies, can capitalize on these opportunities, while small-scale fishers struggle to compete due to limited market access and financial constraints (Cánovas-Molina & García-Frapolli 2022). As a result, many marginalized fishers turn to IUU fishing as a means of survival (Cochrane 2021).

Furthermore, climate change and environmental degradation are adding further pressure on fish stocks, disproportionately impacting small-scale fishers who rely on traditional fishing methods. Rising sea temperatures, changes in fish migration

patterns, and extreme weather events have contributed to declining fish stocks, making it increasingly difficult for local fishers to maintain their livelihoods (Pham et al. 2023). Political Ecology emphasizes that these environmental changes do not affect all fishers equally. Wealthier commercial operators have the means to adapt through technological advancements and diversified income sources, while small-scale fishers lack institutional support and financial resources to cope with climate-induced resource depletion (Wang & Azam 2024). By analyzing governance failures, policy inconsistencies, and external economic pressures, Political Ecology provides a holistic framework for understanding why small-scale fishers remain vulnerable to both environmental and socio-political challenges.

3.1.6 Historical and Institutional Influences on Fisheries Management

The historical and institutional context of fisheries governance in Sri Lanka has played a significant role in shaping the current challenges and inequalities within the sector. The colonial history of Sri Lanka left a lasting impact on marine resource ownership and fishing rights, with many traditional fishing communities being marginalized from decision-making processes (Wickramasinghe & Bavinck 2015). During the colonial period, marine and coastal resources were primarily managed to serve colonial economic interests, leading to the exclusion of local fishing communities from governance structures. These patterns persisted post-independence, with state-imposed regulations often disregarding traditional fisheries management systems (Bryndum-Buchholz et al. 2021). In many cases, government interventions replaced customary fishing practices with top-down policies, disrupting the balance between local fishers and marine resource management (Gebremedhin et al. 2021).

In addition to colonial influences, the institutional frameworks established in the post-independence era continued to prioritize commercial fishing and export-driven policies, often at the expense of small-scale fisheries (Glynn & D'Aunno 2023). The introduction of modern licensing systems, quota allocations, and spatial planning disproportionately favoured large-scale fisheries and international investors, leaving small-scale and traditional fishers with fewer opportunities to compete (Kriegl et al. 2021). Moreover, bureaucratic inefficiencies and political corruption further deepened these disparities, allowing well-connected commercial enterprises to benefit from preferential access to marine resources, subsidies, and policy exemptions (Scholtens 2016). The failure to integrate indigenous knowledge and community-based fisheries management into national policies has also contributed to ongoing conflicts and governance failures. Many

traditional fishery management systems, such as seasonal closures, community-enforced fishing boundaries, and gear restrictions, were historically effective in regulating fish stocks (Cooke et al. 2021). However, these practices were often overlooked in favor of centralized governance approaches, which lacked the flexibility to adapt to local ecological and social conditions (Mason et al. 2022). This shift led to increased tensions between fishing communities and regulatory authorities, with small-scale fishers perceiving government policies as restrictive and exclusionary rather than supportive of their livelihoods.

Furthermore, global economic pressures and international trade agreements have played a decisive role in shaping Sri Lanka's fisheries sector, reinforcing existing inequalities. The liberalization of seafood exports, driven by global market demands and free trade agreements, has encouraged industrial-scale fishing practices while placing additional financial pressures on small-scale fishers (Sumaila et al. 2016b). International sustainability initiatives, such as certification schemes and conservation programs, have often been introduced without adequate consultation with local communities, creating barriers to market access for small-scale fishers who struggle to meet the imposed standards (Howell et al. 2021).

3.1.7 The Role of Political Influence in Fisheries Regulation

Another critical aspect that Political Ecology explores is the role of political influence and vested interests in fisheries management. In Sri Lanka, some large-scale illegal fishing operations are reportedly backed by politically influential actors, making enforcement efforts difficult (Kularatne 2020). Political Ecology helps explain why environmental policies often fail in such contexts, when political elites benefit from resource exploitation, environmental regulations are either weakened or selectively enforced. For small-scale fishers, the lack of political representation further exacerbates their vulnerability. Without strong advocacy groups or union representation, they often struggle to influence policy decisions that affect their livelihoods. As a result, their voices are frequently overlooked in discussions on sustainable fisheries management, reinforcing cycles of poverty and environmental degradation (Scholtens 2016).

Drawing on Political Ecology and Collective Action Theory, this study will analyze how governance, power relations, and collective efforts shape illegal fishing practices in Sri Lanka. The following empirical chapters apply these frameworks to field data.

3.2 Collective Action Theory

Collective Action Theory (CAT) provides a valuable framework for understanding how individuals and groups collaborate to manage shared resources and address common problems. CAT provides a foundational lens for understanding how individuals and groups coordinate to manage shared resources and address common challenges. The theory, suggests that while collective efforts can lead to mutually beneficial outcomes, they often face challenges such as free-riding, lack of trust, and enforcement difficulties (Al-khateeb et al. 2024). In the context of natural resource management, particularly fisheries, these challenges manifest in the difficulty of ensuring that all community members follow sustainable practices and do not exploit the resource for short-term gain. This theory was expanded, arguing that self-governance and community-led initiatives play a crucial role in the sustainable management of common-pool resources. Research has highlighted that small communities, when provided with the right institutional support, can create effective mechanisms to regulate resource use, enforce compliance, and ensure long-term sustainability. However, the success of collective action depends on several key factors, including social cohesion, trust among members, institutional backing, and the presence of clear rules and enforcement mechanisms (Shi & Ling 2025). In the case of fisheries, these factors determine whether a community can effectively regulate fishing activities and prevent the overexploitation of marine resources.

3.2.1 Collective Action and Fisheries Governance

In Sri Lanka's fisheries sector, collective action has been a key factor in shaping resource management and reducing illegal fishing. As noted by Udayanga & Sandaruwan (2020), community-led institutions such as fishing cooperatives and unions function as key collective action mechanisms. These organizations allow fishers to collaborate in establishing regulations, enforcing compliance, and advocating for their rights, particularly in the absence of strong state-led enforcement. Fishing cooperatives, unions, and community-led initiatives serve as primary mechanisms through which fishers collaborate to establish regulations, enforce compliance, and advocate for their rights (Udayanga & Sandaruwan 2020). These organizations not only provide a platform for self-regulation but also strengthen bargaining power against external pressures, such as unfair policy decisions or market fluctuations. In some coastal regions, cooperatives have successfully implemented local monitoring systems, enabling fishers to collectively report violations and restrict harmful fishing practices, such as bottom trawling and unregulated gear usage (Udayanga & Sandaruwan 2020).

Furthermore, the involvement of government agencies and non-governmental organizations (NGOs) in providing training, financial support, and policy guidance has further bolstered collective efforts in certain communities.

However, despite the potential effectiveness of collective action, several structural barriers have hindered long-term cooperation among fishers. Economic pressures remain a primary obstacle, as competition for dwindling resources often discourages cooperative behaviour (Murunga et al. 2021). In contexts where livelihoods are unstable, some fishers prioritize short-term financial gains over long-term sustainability, leading to overfishing and non-compliance with community agreements. Furthermore, power imbalances within cooperatives sometimes limit participation, with larger and more influential fishers dominating decision-making processes, leaving small-scale fishers with less influence over governance structures (Elsler et al. 2022).

Additionally, the lack of strong institutional backing and enforcement mechanisms undermines the effectiveness of collective initiatives. While some communities have self-regulated illegal fishing practices, weak or inconsistent state enforcement has created loopholes that allow offenders to continue operations without consequences (Scholtens 2016). This has led to frustration among rule-abiding fishers, who feel discouraged from following regulations when violators remain unpunished. Without adequate state support, funding, and legal backing, community-based fisheries governance faces significant limitations, making it difficult to achieve sustainable fisheries management on a broader scale. Thus, while collective action holds promise as a tool for sustainable fisheries governance, its success depends on economic stability, strong leadership, trust among fishers, and institutional reinforcement (Paniagua & Rayamajhee 2024). Strengthening collaborative governance models through inclusive participation, equitable policy frameworks, and stronger enforcement mechanisms can enhance the ability of fishing communities to manage resources effectively, ensuring both livelihood security and marine sustainability in Sri Lanka's fisheries sector.

3.2.2 Challenges to Effective Collective Action in Fisheries

The effectiveness of collective action in fisheries governance is often undermined by structural and socio-political challenges that limit cooperation among stakeholders. One of the most persistent obstacles is the free-rider problem, a concept in Collective Action Theory that describes how some individuals benefit from the collective management of resources without actively contributing to its enforcement or adherence to agreed-upon regulations (Bridoux & Stoelhorst

2022). In Sri Lanka's fishing communities, this manifests in unequal compliance with sustainable fishing practices, where some fishers adhere to legally approved fishing methods, while others continue to engage in illegal activities, such as using banned fishing nets, catching juvenile fish, or operating in restricted areas. This disparity creates internal tensions, as those who comply with regulations perceive themselves to be at an economic disadvantage compared to those who violate the rules and still benefit from shared marine resources. The absence of strict enforcement mechanisms further exacerbates this issue, as violators often escape consequences, undermining trust in the collective governance system.

Another major barrier to effective collective action is political interference and the lack of institutional recognition (Bridoux & Stoelhorst 2022). While fishing cooperatives and unions exist in many coastal regions, their ability to influence policy decisions and enforce regulations is often limited by external political pressures. Large-scale fishing operators and commercial interests with strong political ties sometimes use their influence to circumvent restrictions, bypassing regulations that small-scale fishers must comply with (Kularatne 2020). As a result, community-led efforts to promote sustainable fishing face significant challenges in gaining institutional legitimacy. Without proper legal backing and government support, even the most well-organized collective initiatives struggle to hold violators accountable, leaving small-scale fishers disempowered in their attempts to protect their livelihoods and marine ecosystems.

Trust and social cohesion also play a crucial role in determining the success of collective action. Research indicates that strong social ties, mutual trust, and shared long-term goals encourage community members to cooperate and self-regulate, ensuring that rules are enforced fairly (Partelow et al. 2022). However, in economically vulnerable fishing communities, financial insecurity often weakens trust, as fishers prioritize short-term survival over collective sustainability. When immediate financial pressures take precedence, adherence to sustainability agreements becomes secondary, increasing instances of rule-breaking and non-cooperation. Furthermore, historical inequalities in resource access, where small-scale fishers have had fewer opportunities compared to large-scale operators, further hinder trust in community-led governance mechanisms. Without mechanisms to build trust, ensure fairness, and strengthen cooperation, efforts to regulate illegal fishing through collective action remain fragmented and inconsistent (Partelow et al. 2022). To overcome these challenges, it is essential to implement supportive legal frameworks, provide economic incentives for sustainable fishing, and foster social cohesion within fishing communities.

3.2.3 Conditions for Successful Collective Action in Fisheries Management

Despite these challenges, there are conditions under which collective action can lead to effective fisheries management. Research has identified several key principles for successful self-governance of common-pool resources, which include (Vandergeest & Marschke 2021),

- Clearly defined community boundaries and resource access rights- Ensuring that community members have recognized and exclusive access to fishing grounds helps foster a sense of ownership and responsibility.
- Participatory decision-making- When fishers are actively involved in crafting rules and regulations, they are more likely to comply with them.
- Locally crafted enforcement mechanisms- Communities that establish their own enforcement and sanctioning mechanisms tend to have higher compliance rates.
- External recognition and government support- Formal legal backing for community-led fisheries management helps strengthen the legitimacy and authority of collective action efforts.
- Conflict-resolution mechanisms- Clear processes for addressing disputes help prevent breakdowns in cooperation and trust among fishers.

In Sri Lanka, some coastal communities have demonstrated the potential of effective collective action in fisheries management. For instance, in certain regions, fishers have established informal monitoring groups to prevent illegal fishing, reporting violations to authorities and imposing peer-driven sanctions on those who engage in unsustainable practices (Peramunagama & Ramanathan 2021). These efforts highlight the importance of community-led enforcement mechanisms, which can supplement weak state enforcement. However, for such initiatives to be scaled up and replicated across other fishing communities, additional support is necessary. Government agencies and NGOs must play a role in providing financial incentives, training programs, and legal recognition for community-led fisheries management efforts. Research suggests that when state institutions collaborate with community-based organizations, compliance with sustainable fishing regulations improves significantly (Garlock et al. 2022).

By applying Collective Action Theory, this research examines the extent to which Sri Lankan fishing communities can self-organize to address illegal fishing and promote sustainability. The study explores the factors that enable or hinder effective collective action, such as economic conditions, social cohesion, institutional support, and governance structures. Understanding these dynamics is essential for developing more inclusive and community-centered policies that

support sustainable fisheries management. The findings of this research have broader implications for fisheries governance beyond Sri Lanka. Many small-scale fishing communities worldwide face similar challenges related to resource management, governance failures, and economic instability. Insights from this study can contribute to global discussions on the role of collective action in marine conservation and fisheries sustainability, reinforcing the need for localized, participatory approaches to fisheries governance.

4. Methodology

This study employed a qualitative research approach to understand social, economic, and environmental dimensions of illegal fishing and sustainable practices in Sri Lanka's coastal communities. The research was designed to capture the lived experiences of key stakeholders, their perceptions of regulatory frameworks, and their engagement in sustainable fisheries management. A combination of semi-structured interviews, and secondary data analysis provided a comprehensive understanding of the issue.

4.1 Epistemology & Research Design

The study was based on an interpretivist epistemology, aiming to understand social realities through the perspectives of individuals engaged in fisheries (Schwandt 1994). Interpretivism assumes that reality is socially constructed, so this approach allowed the study to explore how fishers and stakeholders interpret their own experiences, values, and challenges related to illegal fishing. Given the complexity of illegal fishing and its socio-economic impacts, a qualitative research design provided a deeper insight into these issues. By focusing on personal experiences and institutional responses, the research identified key challenges in fisheries management. Semi-structured interviews were conducted, allowing participants to share their views freely while ensuring that key topics were covered. To complement the primary data, secondary sources, including government reports, legal frameworks, and policy documents, were analyzed to provide a broader understanding of regulatory and economic influences.

4.1.1 Qualitative Data Collection

Primary data collection was conducted through direct engagement with key stakeholders in Sri Lanka's fisheries sector. Semi-structured interviews served as the primary method, facilitating in-depth discussions on illegal fishing, sustainable practices, and governance challenges.

4.2 Selection of Study Sites

The selection of study sites was guided by the need to capture diverse experiences of illegal fishing and sustainable fisheries management. Coastal districts in Southern Provinces (Galle, Matara & Hambanthota districts) were prioritized, as they historically faced significant challenges related to illegal fishing, cross-border conflicts, and economic dependence on marine resources. These locations included major fishing harbours, community-run cooperatives, and areas where local enforcement efforts were either strong or lacking. Selecting multiple sites allowed for comparisons between different regulatory environments, levels of community engagement, and socio-economic conditions. By focusing on regions with a high prevalence of illegal fishing, the study provided insights into the motivations, consequences, and potential interventions to address this issue.

4.3 Selection and Definition of Study Topics

The study examines key topics relevant to the governance of fisheries and the socio-economic consequences of illegal fishing. It explored how illegal fishing affected the livelihoods of small-scale and large-scale fishers, the role of government policies in regulating fisheries, and the effectiveness of community-led enforcement mechanisms. Additionally, it investigated the impact of transboundary fishing conflicts, the role of fisheries cooperatives in sustainability efforts, and the broader implications of environmental policies. Another key area of focus was the role of communication in fisheries management. This study drew on concepts from participatory communication theory and dialogic communication (Servaes 2022), which emphasize mutual understanding, stakeholder engagement, and horizontal knowledge exchange. These perspectives help explain how knowledge about illegal fishing and sustainable practices was shared within communities and between regulatory authorities and fishers. Understanding how communication influenced compliance with regulations and engagement in sustainability initiatives provided valuable insights into improving policy implementation and participatory governance.

4.4 Access to the Field

Since the researcher was based in Sweden, data collection was conducted remotely through virtual platforms. This approach enabled engagement with participants across various locations, including fishing communities, regulatory institutions, and industry representatives, without geographical constraints and convenient as well since it was researcher's mother nation. Virtual interviews also

ensured accessibility for stakeholders who might have found in-person meetings logistically challenging due to work commitments or travel limitations.

The researcher's prior familiarity with the Sri Lankan fisheries context, gained through academic training in environmental communication and previous engagement with coastal development initiatives, provided a foundational understanding of local dynamics, stakeholder roles, and regulatory structures. This background informed the design of interview questions, enhanced the researcher's ability to interpret responses contextually, and contributed to building trust with participants. As a Sri Lankan national with language proficiency and cultural insight, the researcher was also well-positioned to navigate sensitive discussions and encourage open dialogue.

Access to fishing communities and regulatory institutions was facilitated through partnerships with fisheries cooperatives, local government offices, and relevant organizations. Establishing trust with local fishers and community leaders was crucial in securing meaningful participation in interviews. Prior consultations with local stakeholders helped identify key informants and determine the most appropriate methods for engagement. Ethical considerations were prioritized throughout the research process. Informed consent was obtained from all participants, ensuring that they understood the purpose of the study and their rights as interviewees. Cultural sensitivities were respected, and interviews were conducted in a manner that allowed participants to share their experiences without fear of repercussions. An example includes providing the option for participants to remain anonymous and allowing interviews to be scheduled around their availability and comfort, especially for women and regulatory staff. In cases where interviews were conducted in sensitive regulatory environments, necessary approvals were sought from local authorities.

4.5 Methods

4.5.1 Respondents

The study included a diverse group of respondents who were selected based on their direct involvement in fisheries and their knowledge of illegal fishing practices and sustainability efforts. The selected 10 participants represented different stakeholder groups, ensuring a broad understanding of the issue from multiple perspectives. The stakeholders included leaders of fishing unions, large-scale fish owners, marine biologists, local government officials, women from fishing communities, youth engaged in fishing, department of fisheries officials, marine police officers, fish processing representatives, and tourism industry

representatives. Each of these stakeholders played a distinct role in either fisheries management, policy enforcement, or the economic aspects of the fishing industry (shown in Table 1).

Table 1: Summary of Participants

Stakeholder Group	Role & Contribution
Leader of Fishing Union	Provided insights into collective action, policy advocacy, small scale fishing and local fishing regulations.
Large-Scale Fish Owner	Discussed the economic perspectives of commercial fisheries and challenges in balancing sustainability with profitability.
Marine Biologist	Offered expert knowledge on marine conservation, ecological impacts of illegal fishing, and sustainability strategies.
Local Government Official	Explained government policies, regulatory enforcement, and gaps in governance related to fisheries management.
Woman of Fishing Community	Shared gendered perspectives on the role of women in fisheries, economic struggles, and barriers to participation.
Youth of Fishing Community	Provided insights into generational shifts in fishing practices, economic aspirations, and concerns about the future of fisheries.
Marine Police Officer	Discussed law enforcement challenges, illegal fishing operations, and limitations in patrolling fishing zones.
Fish Processing Representative	Highlighted issues in the seafood supply chain, market access for small fishers, and certification requirements.
Tourism Industry Representative	Provided perspectives on sustainable seafood demand, eco-tourism initiatives, and market incentives for legal fishing practices.
Department of Fisheries Official	Explained national fisheries regulations, enforcement challenges, and policy recommendations for sustainable fishing.

The respondents were identified using purposive sampling, ensuring that individuals with relevant expertise and experience were included. Efforts were made to ensure a balance between small-scale and large-scale perspectives, as well as gender representation. Respondents were contacted through fishing cooperatives, local government offices, and professional networks. They were provided with an overview of the research objectives and were given the opportunity to voluntarily participate in the study. The final selection was made based on their willingness to share their experiences and their relevance to the research focus.

4.5.2 Individual Interviews

Individual interviews were conducted virtually, given the researcher's location in Sweden. This online format ensured accessibility for participants across different regions, minimizing logistical constraints while maintaining an interactive and in-depth discussion environment. The semi-structured interview approach allowed for flexibility, enabling respondents to elaborate on their experiences while ensuring that key themes related to illegal fishing and sustainable fishing practices were explored. The duration of the interviews varied between 30 to 60 minutes, depending on the availability of participants. All interviews were recorded with prior consent and later transcribed for analysis. Ethical considerations were maintained throughout, ensuring that participants provided informed consent and that confidentiality was upheld. The virtual format also allowed for a diverse range of stakeholders, including fishers, policymakers, and industry representatives, to participate without the need for physical travel, thereby broadening the scope of insights collected.

4.5.3 Data Analysis

The collected data was analyzed using qualitative manual thematic analysis. Transcribed interviews and field notes were carefully reviewed, and key themes were identified based on patterns and recurring issues. Thematic coding was applied to categorize responses into different analytical areas, such as economic pressures, governance challenges, community engagement, and enforcement mechanisms. This method allowed for a structured interpretation of the data while maintaining the depth and complexity of participants' responses. Secondary data from government reports, academic literature, and policy documents were also analyzed to supplement the primary findings. This triangulation of data sources helped validate the results and provided a broader context for interpreting the findings. The analysis was conducted iteratively, ensuring that emerging insights were considered and incorporated into the study. The results were used to develop

policy recommendations and strategies for enhancing sustainable fishing practices and reducing illegal fishing activities in Sri Lanka. This data analysis process specifically informed the development of Chapter 5, which presents findings from the semi-structured interviews. Chapter 3, in contrast, was developed through a literature-based approach to establish the theoretical framework guiding the study.

5. Data & Analysis

Here is the results chapter, incorporating a manual thematic analysis with direct quotations from the interview responses. This chapter presents the findings of the study based on manual thematic analysis of qualitative interviews conducted with key stakeholders in the Sri Lankan fishing industry. Five major themes were identified in the thematic analysis: (1) Economic Pressures and the Persistence of Illegal Fishing, (2) Community Trust and Collective Action, (3) The Role of Governance and Enforcement, (4) Sustainable Fishing Practices and Barriers to Adoption, and (5) The Intersection of Fisheries and Other Industries.

Major Themes

5.1 Economic Pressures and the Persistence of Illegal Fishing

A recurrent theme across the interviews was that economic hardship forces many fishermen to engage in illegal fishing practices. Participants explained that while they understood the long-term consequences, immediate financial survival often took precedence over sustainability. A leader of a fishing union described the struggle as follows,

"Many fishermen feel they have no choice but to fish illegally. The market prices are too low, and legal fishing methods do not always provide enough income to support their families." (Stakeholder 1)

Similarly, a large-scale fish owner noted that high operational costs made it difficult to stay competitive without resorting to illegal methods:

"Fuel costs, maintenance, and licensing fees keep rising. If others are using illegal methods and getting bigger catches, how can we survive without doing the same?" (Stakeholder 2)

These responses highlight that economic constraints remain one of the biggest obstacles to sustainable fishing. Without alternative livelihoods or fair market prices, the pressure to engage in illegal fishing will continue.

5.2 Community Trust and Collective Action

Another significant issue identified in the interviews was the lack of trust among fishermen and the weakening of traditional collective action. Many respondents indicated that community enforcement used to be strong, but economic struggles and external pressures have made it difficult to maintain.

A local government official explained,

"Some fishermen follow the rules, but others don't. If they see others getting away with illegal fishing, they start thinking, why should I be the only one following the law?" (Stakeholder 4)

A marine police officer confirmed this lack of trust, stating,

"Many fishermen don't believe enforcement is serious, and some illegal fishers are protected by influential figures." (Stakeholder 8)

This distrust also extends to cooperation with authorities. Fishermen are hesitant to report illegal activities because they fear retaliation or do not believe authorities will act.

However, there were examples of successful community-led initiatives. A leader of a fishing cooperative shared,

"In some areas, cooperatives stopped destructive fishing by creating local monitoring groups. These worked because there was strong leadership and community buy-in." (Stakeholder 1)

These findings suggest that restoring trust and strengthening community-led governance mechanisms could help combat illegal fishing. However, these efforts need legal backing and economic incentives to be sustainable.

5.3 The Role of Governance and Enforcement

The lack of effective enforcement was a widely discussed issue. Most respondents felt that existing laws were not implemented properly, allowing illegal fishing to persist.

A Department of Fisheries official noted,

"We try to enforce regulations, but our resources are limited. Many illegal fishers operate under political protection, making it difficult to take action." (Stakeholder 7)

Similarly, a large-scale fish owner expressed frustration with government inaction,

"We report illegal activities, but authorities take too long to act. It's frustrating because honest fishermen lose while illegal ones make more profit." (Stakeholder 2)

These responses reveal that weak enforcement undermines compliance with regulations. Many fishermen are willing to follow the rules, but they lose motivation when they see others violating them without consequences.

One potential solution suggested by participants was stricter monitoring and increased penalties. A marine police officer stated,

"Harsher penalties for illegal fishing, better monitoring, and financial incentives for sustainable practices would help." (Stakeholder 8)

These findings highlight that stronger regulatory frameworks and consistent enforcement mechanisms are needed to address illegal fishing.

5.4 Sustainable Fishing Practices and Barriers to Adoption

The study also explored the adoption of sustainable fishing practices, revealing several key barriers preventing fishermen from transitioning to legal and eco-friendly methods.

A marine biologist emphasized the importance of sustainability but acknowledged the challenges,

"Better education on the ecological impact of overfishing and illegal practices, stronger law enforcement, and a commitment from both government and industry to provide sustainable economic alternatives are needed." (Stakeholder 3)

A woman from a fishing community highlighted how economic factors make sustainability difficult,

"If a fisherman catches more fish using illegal methods, it affects the entire community, including us. But how can we ask them to stop when they have no other income?" (Stakeholder 5)

Despite these challenges, some sustainable initiatives have been successful. A fisheries cooperative leader shared,

"Some coastal villages have set up local watch teams to report illegal activities, but they only succeed when supported by strong leadership and government backing." (Stakeholder 4)

These responses indicate that while fishermen recognize the importance of sustainability, they need financial support, better infrastructure, and stronger incentives to transition away from illegal fishing.

5.5 The Intersection of Fisheries and Other Industries

The research also found that illegal fishing impacts industries beyond fisheries, particularly the tourism sector and fish processing businesses.

A tourism industry representative explained,

"Tourism businesses depend on sustainable fisheries, but there is little collaboration with fishing communities. Many restaurants and hotels rely on a steady seafood supply, but we rarely discuss sustainability directly with fishermen." (Stakeholder 10)

A fish processing company representative added,

"We work with suppliers and regulators to ensure legal sourcing, but challenges remain in tracking illegal fishing activities." (Stakeholder 9)

These findings suggest that stronger partnerships between fisheries, tourism, and seafood industries could create better market incentives for sustainable fishing. If hotels and restaurants demand legally caught fish, this could encourage fishermen to comply with regulations.

Sub-Themes

While the thematic analysis highlighted five major themes, each of these contained several sub-themes that shed light on the specific drivers and dynamics

of illegal fishing. These sub-themes provide nuance, showing how the broader patterns play out in practice.

5.6 Seasonal Income Variability and Its Effect on Illegal Fishing

One of the recurring concerns raised during the interviews was the impact of seasonal income fluctuations on the behavior of small-scale fishers. In many coastal communities, fishers rely heavily on earnings from a few productive months to sustain their households throughout the year. However, during the off-season, when fish stocks decline or fishing bans are in place, financial insecurity increases, leading some fishers to engage in illegal fishing to meet basic needs.

Stakeholder 1, a union leader, emphasized how these economic difficulties challenge traditional norms,

“In the past, these were respected, but now financial struggles make it difficult for fishermen to follow them. We encourage these practices, but without legal backing, enforcement is weak.”

Similarly, Stakeholder 7, a Department of Fisheries official, acknowledged the difficult choices faced by communities,

“Many fishermen worry that stopping illegal fishing will leave them without an income.”

These insights suggest that non-compliance is not simply a matter of choice, but often a survival strategy in the absence of stable, year-round income sources. To address this issue, the study recommends targeted interventions such as seasonal financial assistance, support for off-season livelihood activities (e.g., fish farming, eco-tourism, or processing), and inclusive programs that help communities adapt to seasonal changes without resorting to unsustainable practices.

5.7 Cultural Norms and Social Pressures in Collective Action

The role of community norms and social pressure in regulating fisheries was a key discussion point in interviews. Traditionally, fishing communities relied on informal governance structures, where respected leaders enforced rules, and peer pressure discouraged illegal fishing.

A local government official reflected on these traditional enforcement mechanisms,

"The government has to take the lead in enforcement, but the community plays a role in awareness and self-regulation. Without community cooperation, even the best policies fail." (Stakeholder 4)

However, the interviews revealed that as economic struggles deepened, community enforcement mechanisms weakened, making it difficult to maintain collective action. A fishing cooperative leader explained,

"We used to work together, but now everyone is focused on their own survival. If others are using illegal nets and making money, no one wants to be the only one following the rules." (Stakeholder 1)

These insights highlight the need to strengthen local governance structures, rebuild community trust, and involve local leaders in co-managing fisheries. Without community participation, formal enforcement mechanisms alone are unlikely to be effective.

5.8 Challenges in Law Enforcement and Political Influence

While enforcement agencies are responsible for monitoring illegal fishing, many respondents expressed frustration over weak enforcement and political interference. Several interviewees believed that some illegal fishers operated with protection from influential figures, making it difficult for authorities to take action.

A marine police officer explained the challenge,

"We enforce the law, but without community cooperation, it's difficult. Fishermen need to report violations instead of protecting offenders." (Stakeholder 8)

Similarly, a large-scale fish owner voiced concern about selective enforcement,

"Small fishers get fined for minor infractions, but large operators who break major rules face no consequences. This discourages us from following the law." (Stakeholder 2)

These responses highlight serious gaps in governance, where corruption and uneven enforcement undermine compliance with fishing regulations. Strengthening transparency, accountability, and monitoring mechanisms is crucial to ensure that laws are enforced fairly and consistently.

5.9 Gender Perspectives in Sustainable Fishing

The study also revealed that women play a critical but often overlooked role in fisheries sustainability. Women are heavily involved in fish processing, sales, and household financial management, yet they have limited representation in fisheries decision-making.

A woman from a fishing community explained,

"We see the effects of illegal fishing first hand. If catches decrease, we suffer too, because we handle fish sales and processing. But when decisions are made, women are not included." (Stakeholder 5)

"Fair prices for legally caught fish, financial assistance for women-led businesses, and better education on sustainable fishing." (Stakeholder 5)

These responses suggest that integrating women into fisheries governance could improve compliance with sustainable fishing practices. Policies should empower women by providing training, leadership roles, and economic opportunities within the fishing industry.

5.10 Strengthening Industry Partnerships for Sustainable Fisheries

The findings indicate that illegal fishing not only affects fisheries but also has consequences for other industries, particularly tourism and seafood processing. Several respondents suggested that stronger collaboration between industries could create economic incentives for sustainable fishing.

A tourism industry representative noted,

"Tourists want to eat fresh, legally sourced seafood. If hotels and restaurants commit to buying only legally caught fish, it will encourage fishers to follow the law." (Stakeholder 10)

Similarly, a fish processing company representative emphasized the importance of traceability,

"We want to ensure that the seafood we buy comes from legal sources, but tracking illegal fishing is difficult. Stronger regulations and certification systems would help." (Stakeholder 9)

These responses suggest that partnerships between fisheries, tourism, and seafood industries could create new market incentives for sustainable fishing. If buyers demand legally caught fish, fishers may be more motivated to comply with regulations. Certification programs, traceability measures, and fair pricing for sustainable catches could further support this transition.

6. Discussion

This chapter critically examines the research findings in relation to existing literature and theoretical frameworks, particularly Political Ecology Theory and Collective Action Theory.

6.1 Economic Pressures and the Persistence of Illegal Fishing

A core finding of this study is that financial insecurity remains a dominant driver behind illegal fishing practices in Sri Lanka's Southern Province. Although many fishers are aware of the ecological and legal consequences, their immediate need to provide for their families often outweighs concerns about sustainability. This confirms what Nahuelhual et al. (2023) emphasize that poverty and unstable livelihoods are among the most significant underlying causes of environmental degradation in coastal communities. In contexts where daily survival is uncertain, long-term environmental thinking becomes a luxury rather than a priority.

The Political Ecology framework helps explain these patterns by drawing attention to the larger structural inequalities that shape how different groups access and use natural resources. Small-scale fishers, for instance, often lack access to the same subsidies, market privileges, and technology available to larger commercial operators (Widjaja et al. 2023). This imbalance puts them at a disadvantage and forces them to adopt riskier, sometimes illegal, methods to compete. The economic playing field is not level; policies and market structures tend to benefit large-scale enterprises, while the most vulnerable bear the brunt of regulatory restrictions without adequate support. In Sri Lanka, this manifests through rising fuel prices, inadequate price control for legally caught fish, and limited access to credit or equipment upgrades. As Udayanga & Sandaruwan (2020) observe, fishers are often caught in a cycle where they are penalized for illegal fishing but not offered realistic alternatives. This situation undermines the legitimacy of enforcement and fosters resentment toward regulatory authorities.

Moreover, enforcement agencies are frequently perceived as disconnected from the daily struggles of fishing communities. This disconnect further complicates compliance, as rules imposed without economic consideration are often resisted or ignored. When fishers see that others are using illegal methods and achieving higher catches without facing consequences, a "race to the bottom" mentality emerges, where rule-breaking becomes normalized. Therefore, sustainable

fisheries governance cannot succeed without addressing the root economic causes that push fishers toward illegal activities. Financial aid programs, targeted subsidies for sustainable gear, fair pricing systems for legal catch, and diversification into complementary livelihoods, such as eco-tourism or aquaculture, are urgently needed.

6.2 Community Trust and Collective Action

A central insight from this study is the weakening of trust within fishing communities, which undermines the potential for effective collective action against illegal fishing. In the past, Sri Lankan fishing communities relied on strong social networks and informal governance structures. These included peer regulation, shared norms, and community-led conflict resolution, all of which helped regulate behavior without heavy reliance on state enforcement. However, this social fabric is now fraying. García Lozano et al. (2023) argue that economic uncertainty, competition over declining fish stocks, and external market pressures erode traditional cooperation, and this was clearly evident in the interviews conducted.

As Collective Action Theory emphasizes, individuals are more likely to engage in cooperative behavior when they believe that others will do the same and that rule-breakers will face consequences (Wicker 2024). Unfortunately, this condition does not hold in many of the communities studied. Fishers frequently expressed that while they are willing to follow sustainable practices, they feel discouraged when they see others breaking the rules with impunity. The perception that “others are getting away with it” fosters a cycle of non-compliance, where trust in both peers and regulatory systems collapses.

This erosion of trust is further worsened by uneven and politically influenced enforcement. As Scholtens (2016) points out, when political favoritism allows certain individuals or groups to operate above the law, it delegitimizes the entire governance system. The fishers interviewed frequently mentioned that those with political connections or financial power are rarely punished, while smaller operators are penalized for minor violations. This double standard leads to resentment and a sense of futility, weakening the willingness to engage in collective monitoring or self-regulation.

The implications of this breakdown in trust are serious. Without strong social cohesion and mutual accountability, even the best-designed formal regulations may fail to achieve compliance. Trust is not only essential for cooperation, but it is also the foundation for effective community-led initiatives. Rebuilding this trust

requires multi-pronged efforts: transparent enforcement mechanisms, inclusive governance processes, and capacity-building for local cooperatives and leaders.

6.3 The Role of Governance and Enforcement

The findings of this study underscore the systemic weaknesses in fisheries governance, which remain a significant barrier to combating illegal fishing in Sri Lanka's Southern Province. Participants repeatedly emphasized that enforcement is both under-resourced and inconsistently applied. While laws and regulations exist on paper, their implementation is often undermined by a combination of logistical limitations, bureaucratic inefficiencies, and political interference. This echoes the observations of Hakanen et al. (2025) who argue that fisheries governance in developing contexts is frequently shaped by competing political and economic interests, leading to selective or symbolic enforcement rather than meaningful regulatory action.

Political Ecology Theory provides a powerful framework for understanding these enforcement gaps. It draws attention to how power dynamics and socio-political structures determine who benefits from resource governance and who is disadvantaged. In the case of Sri Lanka, large-scale commercial fishers often benefit from political protection and economic influence, allowing them to bypass regulations or receive lenient treatment. This disparity in enforcement creates a dual system where small-scale fishers face stricter scrutiny, fines, and surveillance, while more powerful actors operate with relative impunity. As Kularatne (2020) notes, without equitable governance mechanisms, the legitimacy of regulatory systems is fundamentally compromised.

Interviews revealed deep frustration among small-scale fishers who reported illegal activities but saw little to no follow-up action. Many described a lack of trust in law enforcement agencies, viewing them as either powerless or complicit in supporting elite interests. This perception discourages community cooperation and creates a climate of resignation, where even those willing to follow the rules feel demotivated due to the visible success of those who break them. Moreover, corruption and informal patronage networks were cited as barriers to fair enforcement. Several respondents indicated that illegal fishers with political connections were rarely penalized, regardless of the severity of their actions. This unequal application of the law not only reinforces social and economic disparities but also deepens the mistrust between communities and state institutions.

Strengthening fisheries enforcement, therefore, cannot rely solely on increasing surveillance or issuing fines. A more holistic approach is needed, one that

includes institutional reforms, improved transparency, and the depoliticization of regulatory bodies. Investment in technology, such as satellite monitoring and electronic licensing systems, could enhance surveillance capacity and reduce opportunities for manipulation. Equally important is the creation of independent oversight mechanisms to ensure accountability, particularly in politically sensitive regions. Finally, effective enforcement must be paired with participatory governance.

6.4 Sustainable Fishing Practices and Barriers to Adoption

Although the concept of sustainable fishing is widely acknowledged by fishers interviewed in this study, the transition from awareness to action is hindered by multiple socio-economic constraints. Many respondents expressed a willingness to adopt eco-friendly practices but felt that these options remained out of reach due to limited resources, high costs of sustainable gear, and inadequate institutional support. This reflects the broader concern identified by Rayamajhee & Bohara (2021), who assert that sustainability frameworks are unlikely to succeed unless they are embedded within economically feasible models for the communities they aim to serve. One of the most prominent structural barriers is the lack of financial incentives to motivate a shift toward legal and environmentally sustainable fishing methods. For many small-scale fishers, the immediate need for income outweighs concerns about long-term environmental consequences. As revealed in interviews, even when sustainable options exist, the absence of short-term financial support during off-seasons or fishing bans discourages compliance. Without viable alternatives, fishers often revert to illegal or destructive practices as a means of survival, perpetuating a cycle of environmental degradation and economic vulnerability.

MPAs, a popular conservation tool, have had mixed impacts in the Sri Lankan context. While MPAs contribute to biodiversity preservation, they have also generated tensions among local fishers, particularly where top-down implementation has excluded community voices. This finding aligns with Djunarsjah et al. (2021) who argue that the marginalization of small-scale fishers in conservation planning undermines local support and fosters resistance. Participants in this study echoed these concerns, noting that MPAs are often perceived as restrictive zones that limit access to traditional fishing grounds without offering adequate compensation or alternative livelihood pathways.

From a Political Ecology perspective, this tension reveals how environmental governance though well-intentioned can inadvertently reproduce existing

inequalities when local realities are ignored. Small-scale fishers, who are already economically marginalized, are disproportionately affected by conservation policies that fail to account for their dependency on marine resources. This reinforces the need for participatory environmental management, where local communities are not only consulted but also empowered to shape sustainability strategies in ways that reflect their socio-economic realities. Additionally, this study found that gaps in knowledge and awareness further hinder the adoption of sustainable practices. Many fishers lack access to updated information on sustainable technologies, ecological changes, or policy updates. While some NGOs and cooperatives have conducted awareness programs, their reach remains limited. Expanding educational efforts especially those that link sustainability with economic resilience could enhance voluntary compliance. When fishers understand that sustainability directly affects their future income and food security, they are more likely to invest in protective behaviors.

6.5 The Intersection of Fisheries and Other Industries

This study highlights that illegal fishing is not only a problem confined to fisheries management but also has significant ripple effects across adjacent sectors, particularly tourism and seafood processing. These interconnected industries are both dependent on and influential in shaping marine resource governance, making it essential to adopt a cross-sectoral lens in addressing sustainability challenges. This finding supports Gómez-Andújar et al. (2022) argument that integrated, multi-sectoral frameworks are crucial for achieving sustainable fisheries outcomes in the face of complex socio-economic dynamics. In the Sri Lankan context, tourism relies heavily on a steady and sustainable supply of seafood to meet the demands of both domestic and international visitors. However, as this study found, many hotels and restaurants do not actively verify the source of their seafood, leading to an indirect endorsement of illegal and unsustainable fishing practices. The lack of traceability within the seafood supply chain further complicates efforts to promote ethical sourcing. Without clear systems of certification or accountability, businesses may unknowingly purchase fish caught using banned methods or harvested from protected zones. This underscores the need for stronger monitoring systems and clear regulatory frameworks to ensure that fish products entering the tourism and processing sectors meet sustainability standards.

Seafood processors also face challenges in distinguishing between legal and illegal catch, especially when market competition places pressure on suppliers to prioritize quantity over compliance. While some stakeholders expressed

willingness to source responsibly, they also noted the absence of support mechanisms, such as access to certified suppliers, regulatory guidance, or verification tools. This reflects Guttman (2021) emphasis on the importance of multi-stakeholder collaboration, where transparency and trust across the value chain are necessary to create an enabling environment for sustainable practices. Critically, the findings reveal that tourism and seafood industries hold untapped potential as allies in fisheries reform. These sectors can generate bottom-up demand for sustainability by shifting consumer preferences and shaping purchasing policies. For instance, if hotels, restaurants, and processors commit to buying only certified legal fish, this could create powerful market incentives for fishers to comply with regulations. Such initiatives can also reinforce top-down governance by adding commercial consequences to illegal practices, helping to close the enforcement gap often observed in policy implementation.

From a Political Ecology perspective, this cross-industry dynamic demonstrates how economic actors beyond the fishing community can influence access to resources and sustainability norms. It also highlights the importance of equitable participation in governance, where fishers, processors, tourism actors, and regulators work together to co-design solutions that reflect the realities of all stakeholders involved. To operationalize this synergy, policy interventions should prioritize the development of certification systems, traceability infrastructure, and incentive-based programs that reward legal and sustainable fishing. Additionally, awareness campaigns targeting businesses and consumers could strengthen public demand for responsibly sourced seafood. Encouraging formal partnerships between tourism operators, seafood processors, and fishing cooperatives may also help bridge gaps in communication and foster a culture of shared accountability across sectors.

6.6 Addressing Research Questions and Objectives

The findings of this study provide valuable insights into the research questions,

How do coastal communities perceive illegal fishing, and how does communication shape their understanding of its social, economic, and environmental impact?

Findings revealed that while most community members are aware that illegal fishing leads to the depletion of marine resources and harms long-term livelihoods, their daily economic struggles often push them toward these unsustainable practices. The research highlighted that communication around policies, environmental harm, and legal consequences remains fragmented and

poorly delivered, particularly to vulnerable small-scale fishers. In many cases, the lack of reliable, accessible information contributes to misconceptions or indifference. Furthermore, outreach strategies often fail to consider the realities of fishers' lives, leaving them disconnected from broader sustainability goals. Therefore, communication must be reframed to demonstrate how sustainable practices can also yield short-term economic benefits, such as better pricing, market access, or community-based incentives.

What role does social cohesion and trust play in shaping collective responses to illegal fishing?

This study found that informal governance structures that once upheld local rules through community norms and trust have weakened over time. Economic pressures, political divisions, and a lack of enforcement have eroded the social glue that once bound fishing communities. The decline in trust has resulted in hesitation to report offenders or take collective action, especially when individuals feel that others are exploiting the system without consequence. Rebuilding trust among fishers and between communities and enforcement bodies is essential. This can be achieved by promoting inclusive dialogue, ensuring fair rule enforcement, and encouraging the revival of cooperative groups through leadership support and recognition.

What are the key challenges in government and community communication on fisheries management?

The research uncovered deep-rooted structural inequalities within fisheries governance. Larger-scale operators often benefit from favourable policies, political protection, and access to legal exemptions, while small-scale fishers face bureaucratic challenges, weak legal protections, and limited voice in decision-making. Government regulations are either inconsistently enforced or influenced by elite interests, further undermining community trust and participation. These dynamics significantly weaken the credibility of communication efforts and diminish the effectiveness of community-led enforcement mechanisms. Therefore, policy reform must include stronger legal support for community-based monitoring, transparency in regulatory enforcement, and mechanisms to ensure the voices of marginalized groups, especially women, youth, and small-scale fishers, are represented in fisheries planning and decision-making.

This chapter has linked the research findings with existing literature and theoretical perspectives, demonstrating how economic constraints, governance failures, and community dynamics influence illegal fishing. Political Ecology

Theory has been instrumental in understanding the structural inequalities that drive unsustainable practices, while Collective Action Theory has provided insights into the challenges of community-led fisheries management.

7. Conclusion

7.1 Summary of Key Findings

This study examined the persistence of illegal fishing in Sri Lanka's Southern Province by focusing on the interplay between communication strategies, community engagement, and fisheries governance. The findings show that illegal fishing is not simply a result of disregard for environmental rules, but is shaped by deeply rooted socio-economic challenges, institutional weaknesses, and governance failures. Importantly, communication strategies emerged as a critical yet underutilized mechanism, especially in promoting awareness, building trust, and coordinating efforts among fishers, enforcement bodies, and other stakeholders. Weak or inconsistent communication was found to contribute to misunderstanding of regulations and low compliance, whereas clear, consistent communication facilitated better collaboration and knowledge sharing.

Participants across stakeholder groups, including government officials, local fishers, and industry representatives, acknowledged the importance of sustainability. However, they also expressed frustration that their efforts to follow regulations often go unsupported or unrewarded. Many expressed that rules are not applied fairly, and that individuals or groups with political connections or economic influence can often bypass laws without consequence. This perception weakens motivation to comply and erodes trust in governance systems. The study also found that traditional systems of knowledge, such as seasonal fishing norms or informal peer enforcement, are gradually weakening. Collective action has become more difficult due to heightened competition, migration of youth away from fisheries, and reduced trust among community members. Community cooperatives and unions continue to play a role, but they lack the authority, resources, and legal protection to enforce regulations effectively. Women, youth, and marginalized groups are especially excluded from decision-making spaces, which limits the inclusivity and reach of local sustainability efforts.

Weak enforcement further compounds these issues. Although national laws and regulations against illegal fishing exist, they are often inconsistently implemented. Enforcement agencies face political interference, lack adequate resources, or is limited by unclear legal mandates. As a result, even when communities report illegal activity, the response is slow or ineffective, reducing faith in both formal and informal systems of control. Communication emerged as a crucial factor influencing compliance and awareness. Gaps in policy communication, lack of clarity in rule enforcement, and poor collaboration between sectors (e.g., tourism,

fish processing, and fisheries) have limited the success of sustainability programs. In many cases, fishers reported receiving mixed messages from authorities, NGOs, or buyers about what constitutes legal or sustainable fishing. Overall, the study highlights the urgent need for a participatory, community-centered model of fisheries governance, one that strengthens communication channels, restores social trust, ensures equitable access to resources, and supports economic resilience through alternative livelihoods and fair pricing mechanisms. Addressing illegal fishing effectively requires aligning policy goals with local realities and recognizing the socio-political context in which fishers operate.

7.2 Summary of Research Questions

This section revisits the study's core research questions, providing a deeper interpretation of the findings through the lens of Political Ecology and Collective Action Theory. The first research question asked how coastal communities perceive illegal fishing, and how communication influences their understanding of its social, economic, and environmental impact. The study found that most community members, including both small-scale and large-scale fishers, are aware of the long-term dangers of illegal fishing such as stock depletion, damage to marine ecosystems, and rising community conflict. However, this awareness does not always translate into action. One major barrier is the fragmented nature of communication between stakeholders. Information from government authorities is often delayed, unclear, or inconsistent, while awareness campaigns by NGOs lack continuity. This communication gap leads to confusion about regulations and fosters mistrust in both formal and informal governance systems. Furthermore, many fishers, especially those in financially precarious positions, feel excluded from decision-making processes, reducing their willingness to comply with rules they perceive as imposed without consultation.

The second research question explored the role of social cohesion, trust, and collective action in encouraging compliance with sustainable fishing practices. Historically, communities relied on informal rules, peer monitoring, and mutual respect to regulate resource use. These social mechanisms once formed a powerful foundation for collective governance. However, the study revealed that these structures have weakened over time due to increased economic competition, internal divisions, and external political interference. Trust among fishers is eroded when individuals observe others breaking the rules without consequences, leading to a breakdown in collective norms. While some cooperatives and local leaders continue to advocate for community-led enforcement, their efforts often lack legal authority and material support, making it difficult to maintain solidarity. From a Collective Action perspective, this illustrates how the absence of equitable

benefits, clear incentives, and credible enforcement reduces the motivation for cooperative behavior.

The third research question addressed, what are the key challenges in government and community communication on fisheries management? The findings show that structural inequalities play a significant role in shaping the outcomes of fisheries management. Large-scale commercial fishers often have access to capital, equipment, and political influence, allowing them to bypass regulations or receive lenient treatment. In contrast, small-scale fishers operate in a more vulnerable space, constrained by limited access to markets, licenses, and institutional support. These power asymmetries not only limit the success of community-led efforts but also undermine confidence in the legitimacy of the entire regulatory system. Political Ecology Theory was useful in explaining how historical and institutional legacies, policy biases, and economic hierarchies continue to shape resource access and governance outcomes. Without addressing these systemic issues, top-down policies are unlikely to generate lasting behavioral change.

7.3 Contribution to Knowledge

This study contributes new insights into the complex dynamics of illegal fishing in Sri Lanka's Southern Province by emphasizing the critical intersections of communication, governance, and community engagement. While much of the existing literature on illegal, unreported, and unregulated (IUU) fishing tends to focus on its ecological impacts and legal dimensions, this research adds a socio-political and communication-centered perspective. It draws attention to how informal community structures, local perceptions, and communication gaps significantly influence regulatory compliance and sustainability outcomes.

The study enriches the Political Ecology discourse by demonstrating how power imbalances, both within fishing communities and between different levels of governance, affect access to resources and the enforcement of regulations. It shows that illegal fishing is not only a response to economic necessity but also a reflection of structural inequalities shaped by policy design, political patronage, and historical marginalization. Larger commercial fishers benefit from political leniency, subsidies, and better market access, while small-scale operators are disproportionately burdened by regulation and enforcement without receiving equivalent institutional support. These findings echo core concerns in Political Ecology literature about how environmental governance often mirrors broader societal power dynamics.

From the perspective of Collective Action Theory, this research contributes to our understanding of the conditions under which community-led enforcement can either succeed or collapse. It shows that while collective efforts such as cooperatives and informal agreements have historically played a role in managing fisheries, their success is highly dependent on the presence of trust, economic incentives, and legal backing. The weakening of these support systems, due to financial strain, inconsistent government support, and a lack of trust, has led to a decline in cooperative behavior.

7.4 Policy and Practical Implications

The findings of this study point to the need for coordinated and inclusive policy responses that go beyond enforcement alone. Illegal fishing in Sri Lanka's Southern Province is deeply rooted in economic hardship, governance gaps, and social disconnection. Addressing these issues requires practical strategies that combine regulation, community engagement, and economic resilience. Policy interventions must be designed with a deep understanding of the everyday realities faced by fishing communities, especially small-scale fishers who struggle with unstable incomes and limited access to support systems. One of the most critical areas for intervention is the strengthening of community-based fisheries governance. While some cooperatives and local leaders are already trying to monitor illegal fishing practices, their efforts remain weak without proper legal recognition or institutional support. Community organizations should be empowered with more decision-making authority, access to financial and technical resources, and leadership training. Supporting collective enforcement mechanisms also aligns with Collective Action Theory, which highlights the importance of cooperation, trust, and shared benefits in managing common resources effectively. When communities feel ownership of regulations and see fair benefits, they are more likely to comply with sustainable practices.

Improving enforcement and ensuring accountability is another key policy priority. Many participants in this study voiced concern over the lack of consistent enforcement and the political protection enjoyed by some illegal fishers. Stronger monitoring systems, including vessel tracking technologies and transparent reporting platforms, are essential to reduce illegal activities. Moreover, enforcement must be impartial and free from political interference to rebuild trust in regulatory systems. This is closely related to the Political Ecology perspective, which draws attention to how power inequalities and weak institutions undermine environmental governance and fairness in resource access.

7.5 Limitations of the Study

While this study provides valuable insights into the social and governance factors contributing to illegal fishing in Sri Lanka's Southern Province, it is important to recognize its limitations. First, the research was primarily qualitative in nature and relied heavily on semi-structured interviews. Although this approach allowed for rich and detailed responses, it may not fully capture the broader scale or frequency of illegal fishing practices across the region. The findings are based on the perspectives of ten stakeholders and, while diverse, they may not represent all community views or institutional voices, especially those of high-level national policymakers who were difficult to access. Another limitation stems from the researcher's physical absence from the field. Due to logistical constraints, including being based in Sweden, the interviews were conducted remotely through virtual platforms. However, this limitation was somewhat mitigated by the researcher's prior on-site engagement in Sri Lanka's coastal regions and familiarity with local fisheries governance structures, which helped inform the interview design and contextual interpretation of responses. Additionally, some participants may have been hesitant to speak openly about sensitive topics, particularly those involving illegal activities, political interference, or corruption.

7.6 Recommendations for Future Research

Based on the insights and limitations of this study, several areas are recommended for future research. Firstly, there is a strong need for mixed-method approaches that combine qualitative interviews with quantitative data. While this study provided in-depth narratives, incorporating statistics on illegal fishing activities, enforcement outcomes, and community compliance rates would help to validate and strengthen the findings. Large-scale surveys involving multiple fishing regions could also provide a more representative understanding of national trends. Future studies should also explore the long-term impact of community-based interventions. Longitudinal research could track the progress of local cooperatives, surveillance initiatives, or government-backed programs to assess their sustainability over time.

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Popular Science Summary

Fishing has long been a lifeline for coastal communities in Sri Lanka's Southern Province, providing food, jobs, and cultural identity. But in recent years, illegal and unsustainable fishing practices, such as bottom trawling, the use of banned nets, and foreign vessel incursions, have put both marine ecosystems and local livelihoods at risk.

This study set out to understand why illegal fishing persists despite existing regulations, and how communication, trust, and cooperation within communities shape compliance with sustainable practices. Through interviews with fishers, government officials, law enforcement, industry representatives, and community members, the research uncovered several important insights.

Many small-scale fishers know the dangers of illegal fishing but continue these practices out of economic necessity. Rising fuel costs, unstable incomes, and limited access to modern equipment leave them at a disadvantage compared to larger operators. Weak enforcement and political influence further erode trust, when some violators go unpunished, others lose motivation to follow the rules.

Yet, there are also signs of hope. In some villages, fishing cooperatives and community groups have successfully reduced destructive practices through local monitoring and collective agreements. Women, often overlooked in fisheries governance, play a vital role in processing, trading, and advocating for sustainable practices. Partnerships with industries such as tourism and seafood processing could create market incentives for legally caught fish, aligning economic survival with ecological protection.

The findings make it clear that addressing illegal fishing is not just about stricter laws. It requires building trust, ensuring fair economic opportunities, and involving communities in decision-making. Stronger cooperation between government, local fishers, and related industries could help secure both healthy oceans and sustainable livelihoods for future generations.

Appendices

Interview Questionnaire

1. How do people in your community work together to solve fishing-related problems?
2. Do you think it is the community's role to stop illegal fishing, or should it be handled by the government? Why?
3. Are there any unwritten rules among fishermen about what is acceptable and not acceptable in fishing? How are these rules enforced?
4. Do fishermen trust each other when it comes to following sustainable fishing practices? What happens when someone breaks these trust-based agreements?
5. What makes it difficult for people in your community to come together and act against illegal fishing?
6. Have local fishing cooperatives, unions, or community leaders tried to stop illegal fishing? How successful have they been?
7. Many fishermen engage in illegal fishing due to financial difficulties. Do you think communities can help find other solutions to support struggling fishermen?
8. Do you think government support or external programs help or hinder collective efforts within fishing communities? Why?
9. Can you share an example of when the community successfully worked together to solve a fishing-related problem? What made it work?
10. What would make it easier for communities to unite and protect fisheries? What kind of support would be most helpful?

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