LESSONS TRANSLATED: CIVIL SOCIETY ORGANIZATIONS AS KNOWLEDGE BROKERS IN GLOBAL PLASTIC TREATY NEGOTIATIONS

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ABSTRACT

Plastic pollution has become a defining global environmental challenge, leading the UNDP to mandate the Intergovernmental Negotiating Committee (INC) to negotiate for a legally binding instrument. However, after six rounds of negotiations between 2022 and 2025, the process concluded without consensus or an adopted treaty, reflecting deep political cleavages. On one side, the High Ambition Coalition (HAC), comprising Global South states heavily impacted by plastic waste and Global North states with strong environmental standards, pushed for a comprehensive and stringent agreement. On the other side, oil-producer states and major plastic-producing countries resisted binding provisions on production and trade, favouring a business-as-usual approach. Within this contested landscape, civil society organizations (CSOs) played a pivotal role not only as advocates but also as knowledge brokers. This study examines how CSOs brokered knowledge during INC negotiations through informal arenas such as side-events and technical workshops, where they translated complex treaty language, reframed plastics as issues of justice and human rights, and reinforced HAC positions. Beyond negotiation halls, CSOs extended their brokerage through digital activism, transforming lessons from these arenas into webinars, infographics, and social media campaigns that disseminated knowledge globally. The analysis highlights how digital technologies amplify CSO brokerage, bridging global governance with community mobilization.

Keywords: Knowledge Brokers, Civil Society Organizations, Global Plastic Treaty, Digital Activism, Institutional Interplay

1. INTRODUCTION

Plastic pollution has become one of the most urgent environmental challenges today. Plastic waste now spreads into oceans, rivers, soil, and even the air, harming ecosystems and human health (Geyer et al., 2017). Many communities in the Global South live with the daily impacts of unmanaged plastic waste, from clogged drainage and flooding to toxic smoke from open burning (Godfrey & Oelofse, 2017). The global trade in plastic waste also shows clear inequalities, where some countries export their waste to others that lack capacity to manage it safely (Brooks et al., 2018). These realities show that plastic pollution is not only an environmental issue but also a matter of economic, justice and equity (Schuyler et al., 2018).

At the international level, there are already several agreements that touch on plastic waste. The Basel Convention controls transboundary movements of hazardous and other wastes. The Stockholm Convention regulates persistent organic pollutants, some of which are used in plastics. MARPOL deals with pollution from ships, and WTO rules influence trade aspects. Yet none of these instruments cover the full life cycle of plastics (Raubenheimer & McIlgorm, 2018). This has created fragmentation, with overlapping rules and important gaps (Oberthür & Stokke, 2011; Young, 2002). Because plastics involve different sectors such as chemicals, waste, trade, and health, there is no single regime that can provide a comprehensive solution. Plastic pollution has therefore become a wicked problem, difficult to solve and requiring new forms of global cooperation (McIntyre, 2020).

In 2022, the United Nations Environment Assembly (UNEA) responded by adopting a resolution to create a legally binding instrument on plastic pollution. The Intergovernmental Negotiating Committee (INC) was then formed to complete this treaty by 2025 (UNEP, 2022). Between 2022 and 2025, the INC met six times. But despite years of discussion, the process ended without agreement on a final treaty (UNEP, 2025). This failure reflected the deep political divide among states. On one side, the High Ambition Coalition (HAC), which includes many Global South countries most affected by plastic pollution and several Global North countries with strong environmental standards, called for a strict treaty that would include production limits and lifecycle regulations. On the other side, oil-producer states and plastic-producing countries resisted such measures. They preferred voluntary approaches or focused only on waste management and recycling, protecting petrochemical and industry interests (Dauvergne et al., 2025). The negotiations therefore ended in deadlock, showing how difficult it is to balance environmental protection with economic and industrial power. Such fragmentation and uncertainty are the very conditions under which knowledge brokers tend to emerge.

Civil Society Organizations (CSOs) became particularly important in this context. Historically known as advocates and watchdogs in global environmental politics (Jasanoff, 1997; Keck & Sikkink, 1999), CSOs expanded their role

during the INC rounds by also acting as knowledge brokers. They helped governments, especially those with limited technical resources, as well as communities and the wider public, to make sense of complex treaty debates. In this capacity, CSOs translated scientific and legal knowledge into more accessible terms, reframed plastics as issues of justice and sustainability, and mobilized support for stronger commitments (Chew et al., 2022; MacKillop et al., 2023; Ward et al., 2009a, 2009b). Their growing brokerage role reflects how fragmentation and polarization created space for new forms of expertise and advocacy. Moreover, the literature on institutional interplay in International Relations highlights that knowledge transfer is a key mechanism through which regimes interact (Gehring & Oberthür, 2009), 2009). Much of this scholarship emphasizes the role of treaty secretariats as the main brokers of information and expertise (Oberthür & Gehring, 2006). Yet the experience of the INC demonstrates that brokerage is not confined to international bureaucracies. CSOs increasingly assume this function, often more flexibly and in spaces beyond the direct control of states. Their interventions enabled forms of inter-institutional learning, such as when lessons from the Basel Convention's Plastic Waste Amendment were introduced into the plastics treaty debate (Setiawan, 2022).

Existing studies suggest that CSOs often engage in knowledge brokerage through informal arenas such as side-events and workshops, as well as through digital platforms that extend treaty debates to broader publics (Hall et al., 2020; Sorce & Dumitrica, 2022). These spaces are less constrained than formal negotiations and enable translation, framing, and advocacy work. This paper focuses on these two arenas to examine how CSOs contributed to the INC process.

The lack of a final treaty shows the limits of knowledge brokerage in the face of powerful material interests. Yet CSO efforts were not without consequence: they shaped the discourse, raised ambition, and made plastics a visible global justice issue. They also built a knowledge infrastructure, such as reports, webinars, advocacy products, that will continue to influence future negotiations. Despite extensive research on civil society advocacy, little attention has been given to how CSOs act as knowledge brokers during international treaty negotiations. This gap is especially relevant to the INC process, where negotiations stalled amid deep divides between the High Ambition Coalition and producer states.

This paper therefore examines how CSOs acted as knowledge brokers in the INC process. It focuses on two main arenas: informal forums during negotiations and digital activism beyond them. It argues that CSOs translated technical knowledge, reframed plastics as issues of justice, and mobilized global communities in support of a stronger treaty. In doing so, the paper contributes to theoretical debates on knowledge brokerage and institutional interplay, while offering practical lessons on how digital technologies and innovative advocacy can strengthen sustainable community futures. The next section outlines the research method, followed by results and discussion on CSO brokerage, and a conclusion reflecting on contributions and future directions.

2. METHOD

This study employs a qualitative and interpretive design rooted in International Relations (IR) theory to examine the role of Civil Society Organizations (CSOs) as knowledge brokers during the Intergovernmental Negotiating Committee (INC) process on plastic pollution. The choice of a qualitative approach reflects the study's concern with meanings, practices, and social interactions that cannot be captured through quantitative measurement. As Creswell and Poth (2018) argue, qualitative inquiry is particularly suitable for analyzing complex phenomena where multiple perspectives and contextual factors are at play. Similarly, Beach and Pedersen (2019) emphasize that qualitative approaches are effective for tracing processes and unpacking mechanisms, which is crucial in analyzing how CSOs facilitated knowledge transfer and learning in international negotiations.

The conceptual framework of this research is situated within the literature on institutional interplay in International Relations. This body of work identifies four types of interaction between international institutions: ideational or cognitive interplay, which involves inter-institutional learning; normative interplay, where rules or norms from one institution validate or contradict those of another; utilitarian interplay, where decisions in one institution shift incentives in another; and political interplay management, which refers to deliberate coordination across institutions (Gehring & Oberthür, 2009; Oberthür & Gehring, 2006). Among these, this study focuses on the ideational dimension, or inter-institutional learning, which highlights how institutions borrow, adapt, and translate knowledge, rules, or practices from one another. While most scholarship has emphasized the role of treaty secretariats in facilitating such learning, the case of the INC process demonstrates that CSOs can also perform this brokerage role. Their activities resemble the functions identified in the knowledge brokerage literature, particularly translation, framing, and advocacy (MacKillop et al., 2023; Ward et al., 2009b). By approaching CSOs as brokers of inter-institutional learning, this study brings together insights from institutional interplay theory and empirical research on civil society practices in global governance.

Two main procedures were used for data collection: document study and field observation. Document study is a well-established qualitative method for systematically reviewing and interpreting textual materials (Bowen, 2009). It was employed here to gather data from multiple sources. First, official negotiation documents, including UNEA Resolution

5/14 (Resolution 5/14. End Plastic Pollution (UN Doc. UNEP/EA.5/Res.14), 2022), draft texts, chair summaries, and reports published by UNEP (2025), provided the institutional context and record of the negotiation process. Second, CSO position papers and submissions, such as those produced by Break Free From Plastic, Basel Action Network, and GAIA, revealed the strategies and frames that CSOs advanced during the negotiations. Third, agendas, concept notes, and reports from side-events and workshops offered insights into the informal arenas where CSOs frequently operated. Finally, digital advocacy products, such as webinars, infographics, policy toolkits, and social media campaigns, were reviewed to understand how CSOs extended treaty debates to wider publics.

In addition to documents, this study also relied on field observation during the INC-5.1 meeting in Busan, Republic of Korea, in 2024. Participant observation is a method frequently used in qualitative research to capture practices and dynamics in situ (Kawulich, 2005). Attendance at plenary sessions, side-events, and CSO briefings enabled the researcher to record fieldnotes on how CSOs operated as knowledge brokers. Observations focused on how CSOs translated technical treaty language into accessible narratives, invoked justice-oriented framings such as "waste colonialism," interacted with negotiators, and linked discussions in side-events to their subsequent digital advocacy. These observations were invaluable for gaining first-hand insights into practices often absent from official records, such as corridor diplomacy, distribution of briefing papers, and informal exchanges between CSOs and delegates.

The analytical framework for this study was structured around two categories. The first is the arenas of brokerage, specifically informal arenas (such as side-events, workshops, and expert meetings) and digital arenas (including webinars, infographics, and social media platforms). These sites are critical because they allow CSOs to operate outside the constraints of plenary negotiations, creating spaces where translation, framing, and advocacy can be more freely conducted (Hall et al., 2020; Sorce & Dumitrica, 2022). The second category is the mechanisms of brokerage, which capture how CSOs perform their roles within these arenas. Drawing on existing scholarship, the key mechanisms include translation of scientific and legal information into accessible terms, framing of plastics as issues of justice and sustainability, and advocacy aimed at mobilizing negotiators and wider publics (Chew et al., 2022; Ward et al., 2009b). Together, these two categories provide a way to identify both the locus of knowledge brokerage and the strategies CSOs employed in contributing to the INC process.

To enhance the credibility of findings, the study employed triangulation by comparing insights from documents, field observation, and secondary literature (Denzin, 2012). For instance, fieldnotes from side-events in Busan were cross-checked against published summaries by the organizing CSOs, while timelines of digital campaigns were verified against negotiation schedules. This triangulation reduced the risk of bias from relying on a single source and provided a more reliable picture of CSO practices.

3. RESULTS AND DISCUSSION

Arenas of Knowledge Brokerage

This section presents the findings of the study and discusses them in relation to the literature on knowledge brokers and institutional interplay. The analysis is organized around two central dimensions: the arenas of brokerage and the mechanisms of brokerage. Arenas refer to the spaces in which Civil Society Organizations (CSOs) carried out their brokerage functions, including informal arenas within the negotiations and digital arenas beyond them. Mechanisms refer to the practices through which CSOs exercised brokerage, namely translation, framing, and advocacy. The analysis seeks to demonstrate where brokerage occurred and how it was performed, drawing on both documentary sources and field observation during INC-5.1 in Busan. The discussion shows that CSOs played a significant role in mediating knowledge flows and shaping discourse, even though they could not ultimately overcome entrenched material interests of producer states.

One of the most visible arenas of CSO brokerage was the network of side-events, workshops, and expert meetings organized in parallel to plenary sessions. These settings were designed as spaces for exchange between negotiators, experts, and communities, where technical issues could be unpacked more freely than in formal negotiations. They provided an important venue for presenting evidence, highlighting justice dimensions, and showcasing community testimonies.

Document study and field observation at INC-5.1 confirmed that CSOs prepared briefing kits, policy summaries, and presentations that distilled complex issues such as production caps, lifecycle regulation, and waste management obligations into accessible formats. Presentations often combined technical evidence with stories from waste pickers and coastal communities directly affected by plastic pollution, thereby grounding abstract treaty debates in lived realities. These efforts reflected the intention of CSOs to equip negotiators with usable knowledge while simultaneously reinforcing normative frames of justice and equity.

However, observations also revealed that attendance by negotiators at these side-events was limited. Although designed to attract state delegates, many side-events became primarily arenas for intra-CSO knowledge-sharing and

coordination. They functioned as spaces where CSOs strengthened their common stance, shared advocacy strategies, and reinforced commitment across diverse organizations. In this sense, informal arenas were not only about influencing negotiators directly but also about consolidating civil society coherence. By harmonizing frames and technical messages, CSOs prepared themselves to speak with a more unified voice when engaging in plenary interventions or digital advocacy. The limited direct influence on negotiators does not negate the significance of these arenas. Rather, it reframes their contribution: informal arenas served as incubators of civil society solidarity and discursive alignment. This internal consolidation may have indirectly shaped negotiations by enabling CSOs to present more consistent demands and reinforce the High Ambition Coalition's discourse over time. The Philippines' decision to join HAC after Busan, for example, cannot be causally linked to side-events, but the correlation in timing suggests that the broader environment of ambition-oriented discourses, reinforced through CSO coordination, created momentum for state realignment.

From a theoretical standpoint, these findings highlight the dual nature of informal arenas. On one hand, they provided opportunities for translation and framing intended for negotiators. On the other hand, they played an equally crucial role in intra-civil society brokerage, where CSOs acted as brokers to one another, translating scientific reports, aligning frames, and mobilizing across networks. This underscores that brokerage does not only operate vertically from CSOs to states but also horizontally across CSOs themselves, expanding the understanding of how ideational interplay unfolds in global governance. In sum, informal arenas mattered less as sites of direct persuasion of state delegates and more as coordination hubs for civil society. They enabled CSOs to share knowledge, unify messaging, and prepare coherent advocacy strategies, thereby indirectly influencing the negotiations through strengthened collective action.

Beyond the physical sites of negotiations, CSOs also extended their brokerage activities into digital arenas. Digital platforms became especially significant given the global nature of the plastics issue and the need to engage stakeholders who could not be physically present at negotiation venues. Online spaces therefore operated as extensions of the negotiations, carrying information, frames, and advocacy messages to broader publics. CSOs developed a range of digital products during the INC process. Webinars were organized after each negotiation round to brief civil society constituencies, journalists, and community leaders. Infographics and policy explainers circulated through websites and mailing lists, simplifying key treaty provisions such as the lifecycle approach or the scope of production limits. Multilingual guides were also produced to ensure accessibility for non-English speaking communities, particularly in the Global South. Social media campaigns such as #BreakFreeFromPlastic framed plastics as a global justice issue and mobilized public opinion. These campaigns often coincided with negotiation rounds, amplifying calls for ambition and highlighting the consequences of inaction. Hall, Schmitz, and Dedmon (2020) argue that digital advocacy has become a crucial tool for transnational NGOs, allowing them to project influence beyond the closed doors of diplomatic forums.

The democratizing function of these digital arenas is evident in how they made treaty debates more transparent and accessible. Communities that were geographically or economically excluded from attending INC meetings could still follow developments, access simplified summaries, and participate in online discussions. Fieldnotes from Busan showed that several CSO events explicitly linked in-person side-events with livestreamed or recorded digital sessions, ensuring that knowledge circulated both vertically to negotiators and horizontally across activist networks. Digital arenas also supported South–South solidarity. Activists from Asia, Africa, and Latin America participated in online workshops that compared regional experiences with plastic pollution and shared strategies for mobilization. Sorce and Dumitrica (2022) observe that digital activism has a transnational dimension, enabling movements to exchange knowledge and frames across borders. In the INC context, this meant that justice-oriented narratives were not confined to negotiation halls but circulated widely, reinforcing a sense of shared struggle.

The political effects of digital arenas, while less direct than informal events, were nevertheless significant. They sustained engagement between negotiation rounds, maintained public pressure on governments, and kept plastics high on global civil society agendas. They also expanded the reach of CSO framing and advocacy beyond diplomats to include media outlets, local governments, and grassroots groups. This broadened the audience of brokerage activities and strengthened their legitimacy by rooting them in broader societal discourses. Digital arenas hence illustrate how CSO brokerage adapts to contemporary conditions of networked governance. They show that brokerage is not limited to face-to-face exchanges but also involves constructing transnational publics through online tools. Compared to the traditional TAN framework (Keck & Sikkink, 1999), digital activism in this case served not only to pressure states but also to translate knowledge horizontally across activist communities. This expands the understanding of brokerage beyond vertical information transfer into multidirectional and networked processes.

Mechanisms of Knowledge Brokerage

If the arenas of brokerage define where CSOs operated during the INC process, the mechanisms of brokerage explain how they performed their roles within these arenas. Drawing on the literature on knowledge brokerage (Chew et al., 2022; Ward et al., 2009b) and insights from institutional interplay (Gehring & Oberthür, 2009), three mechanisms

emerge as central to CSO practice: translation, framing, and advocacy. Each mechanism captures a distinct aspect of how knowledge was mobilized and deployed in both informal and digital contexts.

One of the most consistent brokerage functions observed was the **translation** of complex information into accessible forms. Negotiating a global treaty on plastics involved highly technical concepts, ranging from microplastic impacts to the regulation of toxic additives. Legal terminology was equally demanding, with debates on lifecycle approaches, extended producer responsibility, and production caps. For many negotiators, especially those from Global South countries with smaller delegations, these complexities created barriers to meaningful participation. CSOs addressed this challenge by producing policy summaries, briefing kits, and technical notes that distilled key points into concise and comprehensible language. At side-events, technical experts affiliated with CSOs presented data on health risks from additives in plastics in formats that could be understood without specialized training. Online, CSOs published infographics and explainer videos that reduced lengthy draft treaty provisions into two- or three-page visuals. These translations were particularly important for journalists and grassroots activists who sought to follow the negotiations but lacked prior exposure to treaty language.

The literature on brokerage highlights that translation does not only mean simplification but also selectivity in what is emphasized (Ward et al., 2009b). CSO translations often highlighted the health and justice dimensions of plastics while downplaying industry arguments on economic costs. This selectivity was not a flaw but a strategic exercise of agency. By shaping what negotiators and publics considered salient, CSOs directed attention toward the distributive consequences of plastics governance. At the same time, the limits of translation were evident. While simplified materials enabled broader participation, they could not erase underlying asymmetries in technical capacity. Producer states with large expert delegations continued to dominate technical debates. As Haas (1992) argues on epistemic communities, expertise often consolidates power rather than equalizes it. CSO translations offered an important counterbalance but could not fully level the field.

Beyond simplifying information, CSOs engaged in **framing** to shape how issues were understood and contested. Framing involves defining problems, attributing causes, and suggesting solutions (Benford & Snow, 2000). During the INC process, CSOs consistently framed plastics not merely as a technical waste management issue but as a justice problem with implications for health, human rights, and environmental equity. This framing was evident in both informal arenas and digital platforms. Side-event presentations often featured testimonies from frontline communities, particularly waste pickers and coastal populations in the Global South, who described plastics as an everyday survival and health challenge. Such narratives reframed plastics as more than environmental waste, highlighting links to social justice and inequality. Online, campaigns such as #BreakFreeFromPlastic amplified the frame of "waste colonialism," which emphasized how wealthier countries exported plastic waste to poorer states with limited disposal capacity (Fuller et al., 2022).

Framing also served as a strategic tool in coalition politics. The High Ambition Coalition's discourse of justice and responsibility resonated strongly with CSO frames, reinforcing the legitimacy of stricter treaty provisions. By contrast, producer states often advanced economic growth frames that emphasized plastics as essential to development. This discursive contest mirrored findings in social movement research that competing frames define the political battlefield (Benford & Snow, 2000). The effectiveness of CSO framing lay in its capacity to combine scientific evidence with moral arguments. For instance, CSOs circulated reports linking toxic additives in plastics to cancer and reproductive health risks, alongside testimonies from communities living near waste-burning sites. This convergence of evidence and lived experience produced a compelling narrative that could be mobilized both in plenary and in public campaigns. However, framing also had limits. Justice-oriented frames resonated strongly with Global South negotiators but were often dismissed by producer states as normative or political rhetoric. This reflects the broader challenge of framing in international negotiations: frames are powerful when they align with interests, but less so when they threaten entrenched economic structures.

The third brokerage mechanism was **advocacy**, which involved direct efforts to mobilize negotiators and publics in support of stronger treaty provisions. Advocacy was expressed in both formal and informal ways. Within negotiation venues, CSOs submitted position papers, engaged in lobbying, and coordinated interventions in plenary. For example, joint CSO statements often consolidated shared positions on production caps or lifecycle approaches, signaling a unified civil society front. In informal arenas, advocacy took the form of networking and corridor diplomacy. CSO representatives approached delegates during breaks, distributed briefing notes, and held small-group discussions to persuade negotiators to support ambitious language. These practices align with earlier observations of NGO diplomacy in environmental regimes, where advocacy often takes place in the margins of formal meetings (Betsill & Corell, 2008). Digital platforms expanded advocacy beyond negotiators to include global publics. Campaigns organized on Twitter and Facebook placed pressure on governments by publicizing their negotiation stances. Online petitions and coordinated social media pushes were timed to coincide with plenary debates, amplifying CSO positions through public visibility. Hall, Schmitz, and Dedmon (2020) note that such digital advocacy reflects the new networked power

of NGOs, which allows them to influence international politics through societal mobilization rather than direct state lobbying alone.

The strength of CSO advocacy was in its ability to combine translation and framing with political mobilization. Technical summaries were not only educational tools but also instruments of persuasion. Justice frames were not only interpretive devices but also rallying cries. By integrating these mechanisms, advocacy transformed knowledge brokerage from passive information provision into active political engagement. Nevertheless, the impact of advocacy was constrained by material power. Oil-producing and plastic-manufacturing states resisted production caps despite sustained CSO pressure. This reflects a broader pattern noted in international environmental politics: while NGOs can shape discourse and influence coalitions, they cannot easily shift entrenched industrial interests without supportive state alliances (Dauvergne, 2018).

This section examined how CSOs brokered knowledge in the INC process by focusing on two arenas, informal and digital, and three mechanisms, translation, framing, and advocacy. Informal arenas were valuable mainly as spaces for coordination and knowledge-sharing within civil society, while digital platforms expanded the reach of advocacy and justice-oriented narratives to broader publics. The combined mechanisms enabled CSOs to make complex issues accessible, strengthen cohesion among organizations, and sustain global mobilization. These contributions were significant in supporting the High Ambition Coalition and promoting inter-institutional learning, even if they could not overcome structural resistance from producer states. The following conclusion of the paper situates these findings within broader debates on institutional interplay and considers opportunities for further development.

4. CONCLUSION

This paper analyzed the role of Civil Society Organizations (CSOs) as knowledge brokers in the Intergovernmental Negotiating Committee (INC) process on plastic pollution. Using insights from institutional interplay theory, it showed that CSOs helped facilitate inter-institutional learning in two primary arenas: informal side-events and digital platforms. Within these arenas, they employed three key mechanisms of brokerage: translation of complex treaty language into accessible formats, framing of plastics as a justice and health issue, and advocacy directed at negotiators and global publics. Together, these practices reinforced the High Ambition Coalition and introduced lessons from other governance regimes into the INC debate.

The results highlight several strengths of CSO brokerage. Informal arenas enabled civil society to consolidate positions, harmonize technical knowledge, and prepare coherent advocacy strategies. Digital arenas expanded the reach of CSO messaging by democratizing access to treaty debates, sustaining mobilization between negotiation rounds, and fostering South–South solidarity. The combined mechanisms of translation, framing, and advocacy allowed CSOs to simplify complexity, add moral and political legitimacy to treaty debates, and mobilize both negotiators and wider publics. In doing so, CSOs contributed to transparency, inclusivity, and ambition in an otherwise fragmented governance process. At the same time, the study also reveals weaknesses and limitations. Side-events were not widely attended by negotiators and often served more as spaces for intra-CSO coordination than for direct state influence. Digital advocacy, while powerful in mobilizing publics, struggled to shift entrenched positions of oil-producing and plastic-manufacturing states. As a result, despite sustained CSO efforts, the INC concluded without agreement on a final treaty. These limitations illustrate the structural constraints that civil society faces when confronting powerful material interests in global governance.

The analysis also points to opportunities for further development. CSO brokerage could be strengthened by systematic documentation of their activities and outputs. Infographics, video explainers, and multilingual guides could be archived as open-access resources for negotiators, journalists, and communities. Tables and coalition maps documenting changes in alliance structures, such as the growth of the High Ambition Coalition, would add clarity to future research and advocacy. Digital archiving of community testimonies would preserve lived experiences that highlight the social and justice dimensions of plastic pollution. Such documentation not only supports academic study but also empowers communities by making negotiation debates more accessible and durable.

In conclusion, CSOs played an essential but constrained role as knowledge brokers in the INC process. They democratized knowledge, reframed plastics as a justice issue, and mobilized advocacy across multiple scales. While unable to overcome entrenched petrochemical interests, they created a knowledge infrastructure that will continue to influence future negotiations. Strengthening this brokerage through improved digital tools and documentation offers a promising path for advancing both global treaty-making and community empowerment.

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