

The Role of Nongovernmental Organizations (NGOs) in Sustainable Fisheries in the Caribbean

El papel de las organizaciones no gubernamentales (ONG) en la pesca sostenible en el Caribe

Le rôle des organisations non gouvernementales (ONG) dans la pêche durable dans les Caraïbes

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EXTENDED ABSTRACT

NGOs with marine mandates have played a significant role in promoting sustainable development from the [regional, sub-regional and national levels](#) in the Caribbean. NGOs such as: regional and national universities, Gulf Caribbean Fisheries Institute (GCFI), Environmental Defense Fund (EDF), Bonefish & Tarpon Trust (BTT), Fundación Caribe Sur, and others that focus on ocean issues and are greatly involved with fisheries have made important efforts to elevate the importance of fishing and fisherfolk in the region's diverse economies and in fisheries sustainability. These NGOs and their members are crucial stakeholders with well-developed and influential social networks that can increase initiatives, messages, and campaigns for the engagement of fishers and the protection of recreational fisheries resources. National and regional NGOs have identified that fisheries sustainability requires more transdisciplinary and transboundary thinking, stakeholder collaborations, and improved public, decision-maker, and fisherfolk scientific literacy. It is evident from the case studies throughout the region that NGOs are playing a key role in research, capacity building, and the dissemination of management strategies and providing a forum for collaborative meetings among stakeholders (industry, public, academia, and governments).

KEYWORDS: Non-government organizations (NGOs), Sustainable Fisheries, Knowledge gaps, Research, Caribbean

INTRODUCTION

The scientific consensus is growing that fishery policy and science both need an interdisciplinary approach combining the biological, economic, and social sciences, and that informed stakeholder involvement needs to be prioritized (Aanesen et al 2014). As a result, diverse groups of stakeholders are increasingly involved in fishery research and management systems (Sampedro et al 2017). Calado et al. (2012) demonstrated the ability of NGOs (used here as shorthand for civil society in general) to incorporate new and emerging concepts and methodologies for maintaining stakeholders engaged and informed. As a result, stakeholders may be better able to keep up with trends in fisheries governance and emerging technologies with the assistance of NGOs. This is critical in an increasingly globalized world, where change is occurring rapidly, whether it is in climate or technology (McConney, et al 2014).

We review the role of NGOs in promoting sustainable fisheries and the use of marine resources in the Caribbean. We discuss the role of NGOs in capacity building, community engagement, and sustainable development, and present cases of partnerships between NGOs, other stakeholders, and governments in the Caribbean. This presentation demonstrates how regional and local NGO initiatives have contributed to responsible fisheries practices, more and better social-ecological system research and outreach for public awareness. Fisheries resources in the Caribbean region have a positive future, provided that the monitoring, control and surveillance systems continue to function, and the effective collaboration between government, industry, scientists. NGOs and stakeholders continues to drive positive change.

NGOs working on marine conservation and management engage in a variety of activities. In addition to advocating and monitoring policies, NGOs bring citizen concerns to governments and promote political participation through information provision. The NGO's role in marine conservation can be divided into four parts, advocacy, action, partnership, and

Table 1. Roles of NGOs in marine conservation.

Advocacy	Action	Partnerships	Engagement
Develop collective engagement to facilitate and promote joint advocacy to influence sectoral and national policies for conservation and sustainability.	Mobilize and encourage stakeholder actions for implementation and support of conservation and sustainability initiatives.	Improve capacities for more effective partnerships among stakeholders scientist and government and other development partners	Ensure effective stakeholder engagement in all activities and initiatives to enhance conservation and sustainability of fisheries resources

engagement (table 1) Crosman (2013).

NGOS ROLES

NGOs pursue several roles and act as strategic partners to achieve those roles. Some of the roles include:

Expertise and Research: Many NGOs have deep expertise in specific areas, such as environmental conservation, social sciences, public health, communication and engagement, or social justice. They provide valuable research, data, and technical knowledge that can guide decision-making processes and capacity building. For instance, environmental NGOs may provide scientific studies on climate change to influence fisheries discussions, or are actively gathering biological, environmental, and social data in the Caribbean region. This information can address topics such as conservation, food security, livelihoods, species and biodiversity assessments, and environmental monitoring (Vance, and Rangeley 2019). It relevant to mention that many of the local and regional NGOs do not always have the capacity or resources to effectively manage, analyze, and share these data.

Improving Decision-Making: NGOs play an important role in decision-making at the regional, sub-regional and national levels, often serving as vital civil society science-policy interface intermediaries between state and non-state actors. In recent decades, they have become increasingly influential in advocating for environmental protection, social justice, and responsible development. (Wiser 2000, Paterlow et al 2020). NGOs have long played a key role in identifying and promoting local, regional and international responses to problems ranging from conservation, sustainability social issues and protection of the environment and plant and animal species (Vance, and Rangeley 2019).

Building Institutional Capacity: Fully functioning NGOs add to the overall conservation and sustainable use

capacity largely by providing services that complement those provided by both the public and private sectors. NGOs work to strengthen the capacity of local institutions (governmental and non-governmental) through practical technical support, knowledge sharing, and organizational development services (Paterlow et al 2020). This helps create more sustainable and effective local organizations. Often a savings of time or money compel the need or desire for NGOs to engage or become involved. NGOs can perform functions that are challenging for other actors. Often the strength of an NGO is to fill gaps where government institutions capacities are weak or absent. The ability to manage contracts more cheaply or more quickly than a government partner is one such example. NGOs are very effective in conducting work that other stakeholders cannot fund or can only be funded through costly contracts.

Improving Collaboration: NGOs often collaborate with other stakeholders, including governments, academia, businesses, other civil society organizations and resource users. By building broad coalitions, they can influence decision-making processes more effectively. Partnerships with international organizations or local grassroots movements also enhance their ability to reach broader audiences and impact policy at multiple levels (Brass et al 2018, Casey 2011). Collaborations with NGOs can strengthen government and academic research and fill in data gaps. However, many regional organizations and institutions often face a numerous challenges, such as the lack of personnel and staff time to analyze collected data; loss of data or institutional knowledge with staff turnover; and a lack of outlets for disseminating the results of their data collection.

Assisting Small and Less-Developed Island States:

Of relevance is the potential role of NGOs in assisting small and less-developed island states to build their capacity for implementing and participating in how fisheries-related activities are accommodated in small island developing states (SIDS) (McConney, et al., 2014).



Figure 1. The Gulf and Caribbean Fisheries Institute (GCFI) core components

SIDS and environmental NGOs have collaborated—and continue to collaborate in other treaty regimes, to their mutual benefit and to the benefit of the treaty regime as a whole. Fisheries-NGO interactions, although poorly documented and understood, are increasing in importance as ecosystem approaches, climate change, poverty alleviation, depletion of major fish stocks and sustainable development all receive global attention (Fanning et al., 2011).

Accountability and Monitoring: NGOs also hold decision and policy-makers accountable. They monitor the implementation of policies, business practices, or international agreements to ensure that commitments are met. NGO involvement in policymaking has been critical to the achievement of critical goals. Despite this, serious shortcomings have emerged in the NGOs sector when it comes to accountability, transparency, and equity issues. Consequently, there has been a growing skepticism in the local and international community regarding their performance, which has impacted their positive global perception (Tortajada 2016).

Communications platforms and brokers information: Many NGOs act as “information brokers”: between broad cross sections of stakeholders including conservation, social or government groups, decision makers and, more broadly, will influence civil society to support their decisions. Bridging gaps between government and stakeholders may help decision-makers better understand stakeholders’ viewpoints and benefit from their specialized knowledge, thus giving stakeholders a voice in decision-making processes (Crosman, 2013).

However, not everything is easy. While some NGO research meets the highest levels of rigor and objectivity, concerns about bias among stakeholder groups are legitimate. In the best-case scenario, biased studies can lead to incorrect management decisions, and in the worst-

case scenario, they might disengage decision-makers who no longer know whom to trust. NGOs face a wide range of challenges, including adapting capacity-building efforts to local contexts without imposing external models that might not be sustainable; implementing projects by themselves or without consulting experts, predetermining goals, ideals, and outputs; and lacking long-term commitment because of short-term funding. They must compete to get funds or government contracts by achieving high social performance (Hackler and Saxton 2007; Miller 2018).

SOME CARIBBEAN FISHERIES NGO EXAMPLES

Many NGOs have developed significant technical expertise on environmental and natural resource problems. Most of the roles described above were performed by the NGOS described in this article.

GULF AND CARIBBEAN FISHERIES INSTITUTE, (GCFI)

The Gulf and Caribbean Fisheries Institute (GCFI) (www.gcfi.org). GCFI, Integrating research, engagement, and partnerships for sustainable fisheries. GCFI was founded in 1947 to promote the exchange of information on the use and management of marine resources in the Gulf and Caribbean Region. From its beginning, GCFI has endeavored to involve scientific, governmental, and resource-use sectors in providing a broad perspective on relevant fisheries, governance, socio-economic and environmental issues. The primary activity of GCFI is the annual conference which has been held in the Region since 1948. The conference is devoted to technical presentations, symposia, workshops, and forums of current relevance to the use, management, and sustainability of marine and estuarine resources. In addition, the conference has a poster session, a film festival (CINEFISH), fishers field trip and time for informal networking opportunities with leaders in the field. There is financial aid available for students and fishers to attend the conference. GCFI

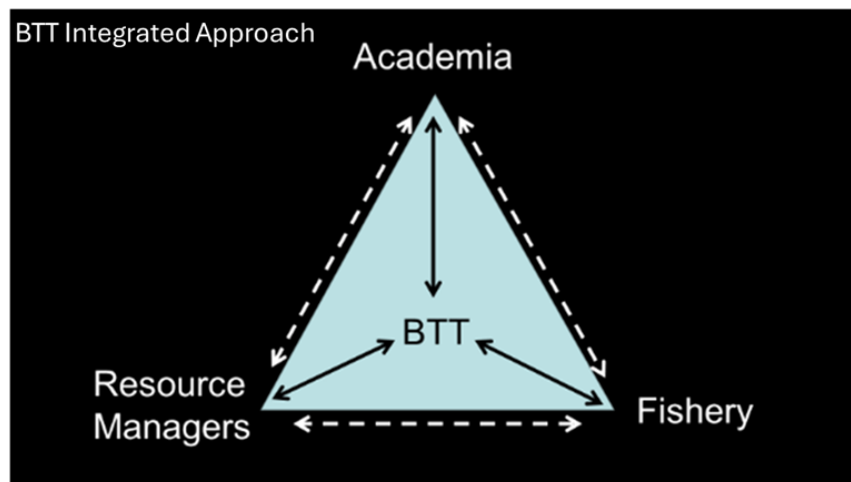


Figure 2. BTT Conceptual approach: BTT is strategically placed at the center of a triangle, with fishers/the fishing community, fisheries and resource managers, and academia each representing a point of the triangle

provides a framework that allows innovation in capacity building and ocean literacy by engaging local, national, and international agencies and NGO's, early career ocean professionals, scientists, fishers, and other stakeholders. Some of GCFI initiatives are: Fishers for Fishers: includes the Gladding Memorial Award, and MPACONnect, a partnership between NOAA/CRCP and GCFI to address MPA management capacity a partnership between GCFI and NOAA and co-hosting the Caribbean Node of the Global Partnership on Plastic Pollution and Marine Litter and (GPML-Caribe) with the UNEP Cartagena Convention Secretariat (Fig 1).

BONEFISH & TARPON TRUST, (BTT)

BTT is a non-governmental, science-based, conservation, organization that focuses on the flats fishery resources in the US, Gulf of Mexico, and a few countries of the Caribbean. They use a collaborative approach that includes stakeholders, academics and scientists from different research areas, and resource managers to identify knowledge gaps and conservation threats, design and conduct research, and apply research findings to conservation and management that influence decision making.

Bonefish & Tarpon Trust [was founded in 1998](#) by recreational fishers and fishing guides in the Florida Keys concerned about declines in the bonefish and tarpon populations. With little scientific information available on these species, the organization quickly focused on conducting and funding the research needed to inform conservation. The organization expanded within a few years to include the southeastern US, Gulf of Mexico, and Caribbean Sea as the focal region. Since the fishery is economically and culturally important, it can be used as leverage to advocate for habitat-focused conservation that also benefits other species. As a core component of operations, BTT works with fishing communities.

Conceptually, BTT is strategically placed at the center of a triangle, with fishers/the fishing community, fisheries

and resource managers, and academia each representing a point of the triangle (Fig 2). Thus, BTT acts as both a collaborator with and an intermediary between these sectors, which traditionally have not experienced sufficient communication to drive conservation success (Adams et al 2024). Collaboration with the academic community ensures that high standards are maintained for research. Frequent interaction with resource management agencies ensures that any research is addressing management needs or knowledge gaps and enhances communication channels between the agency and fishers. BTT integrates fishers throughout the process, whereby fishers are queried about perceptions of the fishery to help guide research efforts, are partners in project design, participate in data collection, and advocate for application of research findings to management and conservation.

CENTRE FOR RESOURCE MANAGEMENT AND ENVIRONMENTAL STUDIES, (CERMES)

CERMES was established by The University of the West Indies (UWI) on its Cave Hill, Barbados, campus in 1985 in response to regional and international environmental concerns and the need for environmental programs. CERMES has a strong focus on tropical island environmental management and its mission is to make a significant contribution to sustainable development in the Caribbean region. CERMES has implemented much of its teaching, research and outreach in partnership with national, regional and international organizations.

In addition to academic training and research, CERMES' staff has also contributed to the region with its numerous projects across the ocean and land, as well as significant collaborations with government, academic institutions, and non-governmental organizations (Fig 3).

Some of CERMES engagements are:

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CARIBESUR is Venezuelan non-profit civil organiza-



Figure 3. Areas of expertise addressed by CERMES and selected publication

- Assisting in the formation of the Caribbean Network of Fisherfolk Organizations (CNFO) and maintaining ties for capacity development
- Championing the Small-scale Fisheries Guidelines in the member countries of the Caribbean Regional Fisheries Mechanism (CRFM)
- Promoting the notion of stewardship among fisherfolk and fisheries authorities, ranging from policy influence to responsible practices
- Providing guidance on good governance including the intersectoral coordination mechanisms for multi-level social-ecological systems
- Seeking to reduce fisheries inequities, especially regarding gender.

ENVIRONMENTAL DEFENSE FUND, (EDF)

Environmental Defense Fund (EDF) is a prominent United States-based nonprofit environmental advocacy group, founded in 1967. With a mission to "build a vital Earth for everyone," EDF leverages its deep expertise in science, economics, and policy to create transformative, long-lasting solutions to some of the most pressing environmental challenges of our time. EDF operates as a nonpartisan organization, using sound science, market-based strategies, and legal advocacy to address environmental problems in ways that are effective, practical, and scalable.

EDF plays a critical role in advancing sustainable fisheries and ocean health worldwide, with a particular emphasis on the Caribbean region. EDF's Fisheries and Oceans Program addresses the urgent threats of overfishing, climate change, and marine ecosystem degradation by developing innovative, science-based solutions that empower local communities and strengthen policy frameworks. In the Caribbean, EDF works closely with governments, fishers, and coastal communities in countries like Cuba, Belize, and The

Bahamas to promote climate-resilient fisheries that protect biodiversity, ensure food security, and support sustainable livelihoods.

In Cuba, EDF has been instrumental in fostering partnerships between local fishing cooperatives, scientists, and government agencies to implement science-based management plans for finfish fisheries. These efforts are designed to balance the protection of marine ecosystems with the economic needs of coastal communities. EDF has also supported Cuba in co-creating new scientific knowledge through research expeditions that monitor climate and fishing impacts, helping to inform the development of resilience strategies for the country's fisheries.

In Belize, EDF collaborates with local fishing communities and government agencies to enhance the sustainability of the nation's sportfishing and coastal fisheries. EDF's work in Belize focuses on updating national policies to conserve critical fish stocks and habitats, which are vital for the country's economy and environmental health. By building the capacity of local guiding communities, EDF helps ensure that fishers are equipped with the tools and knowledge to implement sustainable practices that protect their resources for the future.

In The Bahamas, EDF has developed a national network of local fishing guides who are actively involved in habitat conservation and sustainable recreational fisheries management. By fostering collaboration between local stakeholders, EDF supports the creation of management plans that protect marine biodiversity while promoting economic opportunities for Bahamian fishing communities.

EDF's work in the Caribbean and other geographies is rooted in a collaborative approach that seeks to empower local stakeholders while integrating cutting-edge science and policy solutions. These efforts are not only about pro-

tecting ocean ecosystems but also about building resilient coastal communities that can adapt to the challenges of climate change. EDF's projects in the region emphasize the importance of ecosystem-based management, which helps ensure that fisheries are managed in a way that maintains ecological balance and supports long-term sustainability.

The success of EDF's work in the Caribbean and other regions is guided by four strategic pillars:

1. **Empowerment and Secure Tenure:** EDF ensures that local fishing communities have secure rights over their resources and the tools needed to manage them sustainably. By empowering fishers with secure tenure, EDF helps them combat overfishing and restore marine ecosystems, improving the long-term well-being of both the environment and the communities that depend on it.
2. **Broad-Based Advocacy and Financing:** EDF builds coalitions of stakeholders, including fishers, government leaders, scientists, and the private sector, to advocate for climate-resilient fisheries policies. This approach is paired with efforts to mobilize public and private financing, making sustainable fisheries a key investment opportunity. By demonstrating the economic value of sustainable fisheries, EDF helps secure the funding needed to drive long-lasting change.
3. **Focused Geographic Transformation:** The Caribbean serves as a key focal point for EDF's broader global fisheries strategy. In places like Cuba, Belize, and The Bahamas, EDF has implemented successful fisheries management models that demonstrate the benefits of ecosystem-based approaches. These models serve as examples that can be replicated in other regions around the world, helping EDF maximize its global impact.
4. **Galvanizing a Diverse Champion Network:** EDF fosters a network of local champions, from fishers and community leaders to government officials and industry stakeholders, who advocate for sustainable fisheries reforms. These champions are equipped with leadership skills, technical expertise, and the resources needed to implement effective fisheries management, ensuring that local voices play a central role in shaping the future of their fisheries.

Through these four pillars, EDF's work in the Caribbean not only helps protect marine biodiversity but also strengthens the resilience of coastal communities to climate change. By promoting sustainable fishing practices, EDF is contributing to a future where the Caribbean's oceans and the people who rely on them can thrive for generations to come.

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CARIBESUR is Venezuelan non-profit civil organization founded in 2004 with a regional focus on coastal management and the conservation of natural and cultur-

al heritage in the Southern Caribbean Eco-region. With an interdisciplinary team at the helm, this NGO's mission is to be a leading organization in the coastal marine area, combining knowledge, information and community participation, with innovation and experience in environmental and cultural conservation. One of its objectives, is the activation of cooperation mechanisms between actors of the eco-region integrated by Venezuela, Colombia, Panama, Aruba, Netherlands Antilles (Aruba, Curacao and Bonaire) and Trinidad and Tobago, taking into account the dynamic and vital ecological and cultural links that characterize the marine environment we all share, hence CARIBESUR's motto: "In the ocean we all live downstream of somebody else and all of us under the same sky". The II International Workshop of the Southern Caribbean Ecoregion Alliance was organized by CARIBESUR in November 2007 to set in motion regional cooperation mechanisms. http://www.slideshare.net/Taller_Alianza_Caribe_Sur.

CARIBESUR believes that a marine conservation strategy should focus on using connectivity to design and manage protected area networks in the Caribbean. This requires efficient collaboration mechanisms across borders and the involvement of researchers, resource managers and protected area managers, as well as governments and communities. As proof a proposal was introduced to create a marine corridor that connects the Southern Caribbean Islands (Fig 5) (Ref: CORREDOR ECOLOGICO "ISLAS DEL CARIBE SUR" - Revista Explora Ed. n° 2 marzo 2018).

More recently, due to the serious academic and management crisis of research and funding opportunities in Venezuela, aggravated with the vandalization of libraries and other institutional spaces, which compromised and endangered hundreds of records, specimens, and historical data, CARIBE SUR launched an initiative to prevent the loss of irreplaceable data on marine biodiversity, digitizing data information from biodiversity registries, with an emphasis on the country's marine protected areas, carrying out an inventory of the available data sources, as well as training in standards and data formatting of an inter-institutional team of 14 researchers. The "Rescuing the knowledge base of Venezuela's marine biodiversity Project", represents an important contribution to the inventory of marine biodiversity in Venezuela, adding more than 42,000 records to open access platforms like OBIS (Ocean Biodiversity Information System) and GBIF (Global Biodiversity Information Facility).

Among CARIBESUR's most relevant projects are: Marine Ecological Corridor "Southern Caribbean Islands (Fig 4).

<https://drive.google.com/file/d/1D9pLXmEBkH6JdKUwr0NKL6k7O2MlSMYw/view?usp=sharing>

Connectivity Proposal for the Conservation of the Biological Diversity of the Paria and Turuëpano Peninsula National Parks, Sucre State, Venezuela

<https://drive.google.com/file/d/0B2VmhwxLLy9lQlZVbVpJU0l3ZWw/edit?resourcekey=0-rzHfCleoKoVH12sSf4Oqbg> (Short link: <https://tinyurl.com/Caribe-Sur-Paria-Turuepano>)

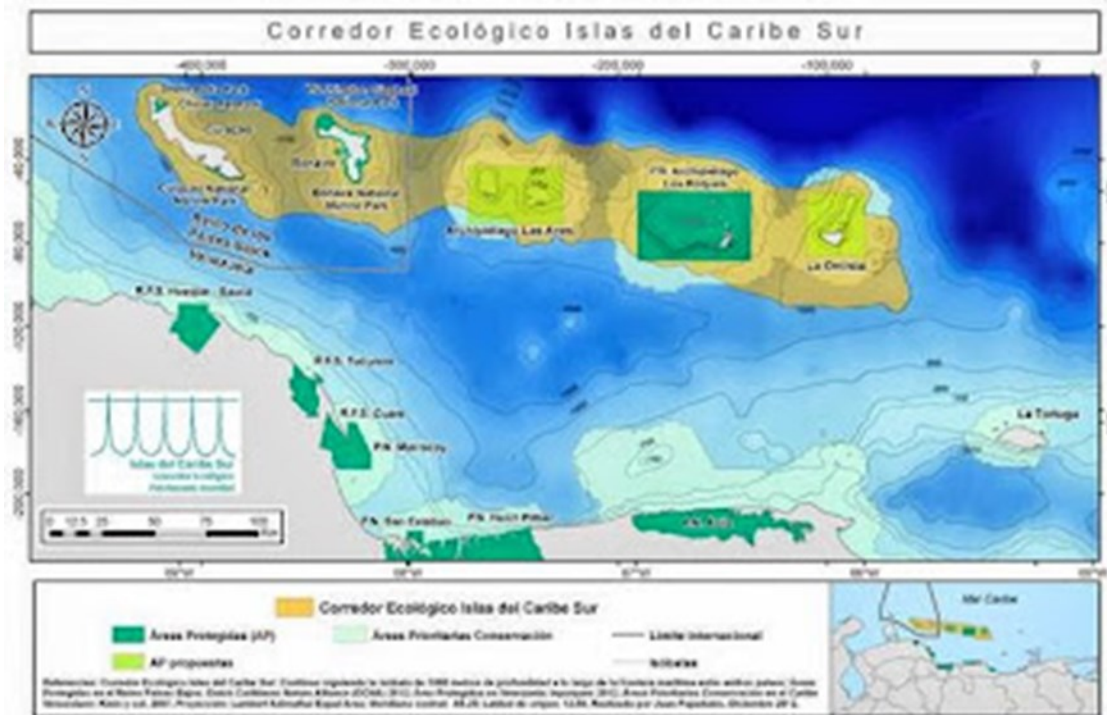


Figure 4. Map of the Marine Ecological Corridor for the Southern Caribbean Islands, one of the largest initiatives of Fundación Caribe Sur.

Literature-based occurrences data of marine species in Venezuela <https://bdj.pensoft.net/article/98213/>

Rescuing the knowledge base of Venezuela's marine biodiversity <https://www.gbif.org/project/BID-CA2020-025-NAC/rescuing-the-knowledge-base-of-venezuelas-marine-biodiversity>

CONCLUSION

Overall, this presentation demonstrated that NGOs engagement through dialogue and many interactions have been beneficial for all stakeholders. One of the main responsibilities of non-governmental organizations is to bridge the gap between managers and stakeholders and to help resource managers develop new management strategies, ensure the enforcement of existing regulations, and engage stakeholders more effectively. NGOs are essential players in modern governance, influencing decision-making at multiple levels through advocacy, policy development, and direct engagement McConney et al (2014).

Like stakeholders, NGOs can gain from the connections that they help build or facilitate. These connections provide similar benefits: they allow multiple parties to coordinate their efforts, increasing effectiveness and reducing resource burdens (Crosman 2013). These relationships can also provide NGOs with additional leverage when it comes to conservation and management efforts. NGOs enhance inclusivity, transparency, and accountability of decision-making processes and often provide a bridge between the public and formal institutions of power. Their role in fostering more just, sustainable, and democratic societies is criti-

cal in addressing the complex challenges of today's world.

Over the last few years, government agencies, industry, and government have recognized the importance of nonprofit organizations to society and the environment, resulting in stronger relationships between nonprofit organizations, industry, and government. Stakeholders appear to be willing to work collaboratively on current issues as they deal with them in a more cohesive and consistent manner. At the same time, NGOs are in a vulnerable position in terms of sustainability due to their reliance on stakeholders, including donors, funders, and government agencies.

Caribbean NGOs are critical for holding decision-makers accountable and ensuring the sustainability of the region's fisheries. They actively monitor the enforcement of policies and international agreements, safeguarding valuable marine resources. Through rigorous research and data collection, they provide crucial evidence for informed decision-making and advocate for responsible fishing practices. By working directly with fishing communities and fostering collaboration between governments, scientists, and industry, NGOs act as a driving force for positive change and ensure that commitments to sustainable fisheries management are upheld.

LITERATURE CITED

Adams, A.J., Boucek, R.E., Lewis, J.P., Lombardo, S.M., Perez, A.U., Wilson, J.K., Brownscombe, J.W. and Griffin, L.P. (2024),

Stakeholder Engagement as a Core Component of Recreational Marine Fisheries Research, Education, and Conservation. Fisheries. <https://doi.org/10.1002/fsh.11166>

- Aanesen, M., Armstrong, C. W., Bloomfield, H. J., and Rockmann, C. 2014. What does stakeholder involvement mean for fisheries management? *Ecology and Society*, 19: 35. <http://dx.doi.org/10.5751/ES-06947-190435>.
- Brass, J. N., Longhofer, W., Robinson, R. S., & Schnable, A. 2018. NGOs and international development: A review of thirty-five years of scholarship. *World Development*, 112, 136–149.
- Casey, J. 2011/ "A New Era of Collaborative Government-Nonprofit Relations in the U.S.?", *Nonprofit Policy Forum*: Vol. 2: Iss. 1, Article 3. DOI: 10.2202/2154-3348.1010
- Charnovitz, S. 1997. Two Centuries of Participation: NGOs and International Governance, 18 *Mich. J. Int'l L.* 183, 200.
- Crosman, K.M. 2013. The Role of Non-Governmental Organizations in Marine Conservation. Master of Science Thesis (Natural Resources and Environment). The University of Michigan. 86p.
- Fanning, L., Mahon, R., and McConney, P. (Eds). 201). *Towards marine Ecosystem-Based Management in the Wider Caribbean*. Amsterdam University Press, Netherlands. 428 pp.
- Hackler D, Saxton GD. 2007. The strategic use of information technology by nonprofit organizations: increasing capacity and untapped potential. *Public Adm Rev*;67(3):474–487. doi: 10.1111/j.1540-6210.2007.00730.x
- McConney, P., Pomeroy, R., and Khan, Z. 2014. ENGOs and SIDS: environmental interventions in small island developing states. In: *Governance of Marine Fisheries and Biodiversity Conservation: Interaction and Coevolution* (ed. S.M. Garcia, J.C. Rice, and A. Charles), 360 – 373. Chichester, UK/Hoboken, NJ: Wiley Blackwell.
- Miller EW. Nonprofit strategic management revisited. *Canad J Nonprofit Soc Econ Res*. 2018;9(2):23–40
- Partelow, S., Winkler, K.J, and Thaler, G.M. 2020. Environmental non-governmental organizations and global environmental discourse. *PLoS One*. May 27;15(5):e0232945. doi: 10.1371/journal.pone.0232945. PMID: 32459807; PMCID: PMC7252593.
- Sampedro, P., Prellezo, R., Garcia, D., Da-Rocha, J. M., Cervino, S., Torralba, J., Touza, J., Garcia-Cutrin, J., and Gutierrez, M. J. 2017. To shape or to be shaped: engaging stakeholders in fishery management advice. – *ICES Journal of Marine Science*, 74: 487–498.
- Tortajada, C. 2016 Nongovernmental Organizations and Influence on Global Public Policy [Asia and the Pacific Policy Studies](#), vol. 3, issue 2, 266-274.
- Vance, A., and Rangeley, R. 2019. Non-Governmental Organization Roles in Shaping Future Ocean Governance and Management. In *The Future of Ocean Governance and Capacity Development* (Boston: Brill Nijhoff), 53–58.
- Wiser, G.M. 2000. Transparency in 21st Century Fisheries Management: Options for Public Participation to Enhance Conservation and Management of International Fish Stocks (World Wildlife Fund/CIEL. 52p.