CONTRIBUTION 6.6

What is the Right Balance Between International Management and the Involvement of Fishing Communities in the Management of Caribbean Spiny Lobster Fisheries?

Lester Gittens, PhD

lestergittens@bahamas.gov.bs
Department of Marine Resources, Ministry of Agriculture, Marine Resources and Family Island Affairs, Government of The Bahamas, Nassau, Bahamas

Abstract

The Caribbean spiny lobster has an extensive occurrence as it is found in numerous territories from Bermuda to the northern edge of South America. Fisheries based on this species are of equally widespread importance to the Caribbean region. Similarly, the threats to sustainable fishing are just as borderless. Such transboundary threats, the likes of which impact many species, include climate change, illegal fishing, limited management resources and paucity of statistical data. The often-global scale of such challenges necessitate international coordination and cooperation. Indeed this need has manifested itself through various binding and non-binding international agreements seeking to address an array of issues. However, amid the clear need for international management efforts, it should neither be forgotten nor disregarded that direct resource users, in individual communities, must have a say in the management of fisheries resources they depend on. This view is consistent with sustainable development goals. But how is the need for international management, sometimes involving people far removed from the day-to-day needs of communities in distant countries, balanced against the obligation to include communities in management processes? These contrasting ideals are not easy to achieve and can be compounded and confounded by a lack of a clear voice coming from communities. It will take international, national and community level efforts to overcome these challenges.

KEYWORDS: spiny lobster, fisheries management, Caribbean, community involvement

CITATION: Gittens, L., 2026. What is the Right Balance Between International Management and the Involvement of Fishing Communities in the Management of Caribbean Spiny Lobster Fisheries? Contribution 6.6, p439-442 *IN* CRFM, 2026. Volume I: Technical Papers. Presented at the CRFM 20th Anniversary Scientific Conference, 28-31 August 2023. CRFM Special Publication No. 37, CRFM Secretariat https://www.crfm.int/index.php?option=com_k2&view=item&id=936

1. INTRODUCTION

Panulirus argus is a clawless lobster species that thrives as far north as Bermuda and southward throughout multiple territories to the northern edge of South America. This wide geographic occurrence, spanning the Wider Caribbean and just beyond, is reflective of one of this crustacean's common names, i.e., the *Caribbean* spiny lobster. Almost as widespread as *P. argus* distribution is the importance of this species to livelihoods, including major commercial fisheries in various territories. As much as 33,000 (FAO/WECAFC 2007) people have found employment and landings have previously been valued at $800,000,000 (Chavez 2009) due to *P. argus* fisheries in the region.

The Case for International Management

It has been known for decades that there is regional genetic connectivity between Caribbean spiny lobster sub-populations (Silberman et al. 1994, Silberman and Walsh 1994). This is due to an up-to eight month planktonic larval duration (Goldstein et al. 2008). During this period of time, water currents take larvae across multiple geographical boundaries, while gyres and eddies also result in some degree of local retention within some territories (Kough et al 2013). All things considered, the level of biological interconnectivity between *P. argus* sub-populations justifies some level of international management. Here international management includes any form of intergovernmental cooperation and coordination. This need for partnership is because management actions that impact spawning stock in one territory also affect other territories. The converse is also true, i.e., the collective management actions of multiple territories affect single territories.

The need for cross-border cooperation and collaboration to manage Caribbean spiny lobster fisheries and other fisheries becomes even clearer when one considers that there are a multitude of other issues that require regional cooperation. Some of these include mitigation of climate change, protection of ecosystem services as well prevention of illegal fishing, just to name a few.

On the whole, the various reasons for international management of *P. argus* fisheries, could justify consideration of a slightly revised name for this species, namely *the Caribbean's spiny lobster,* a reflection of collective ownership and dependence on the actions of neighboring countries. A multitude of peoples and communities throughout the region would stand to benefit from sustainable management.

The Case for Local Stakeholder and Community Involvement

It is also important to remember that the very peoples, communities, families and individuals, who seek to continue to benefit from spiny lobster fisheries, should be considered and empowered when fisheries management measures are being revised or developed. This is made abundantly clear in the Sustainable Development Goals (SDGs). Moreover, the urgency with which equitable and inclusive management should be considered, is more evident than ever as seen in a 2023 review of global progress toward achieving the SDGs. For example, pertaining to *SDG 10- Reduce inequality within and among countries*, the aforementioned review revealed that COVID-19 likely caused a level of increase in between-country inequality that has not been seen in 3 decades (UN 2023).

Further support for local inclusion and consideration in the management of fisheries should remain at the forefront of thought when the following bigger picture question is asked: " For whom are fisheries resources being managed?" No answer to this question can justifiably exclude local communities and future generations from each and every locale. There is an unequivocal need to balance international and local efforts, while ensuring local inclusion. It is also clear that very careful contemplation is needed if options are considered that allow binding decisions to be made by regional fisheries management organizations. The resulting decision mechanism could involve many people who know very little about the nuances and needs of local communities. Nevertheless, there are indeed instances when this management strategy is needed, however a deviation from national decision-making to international can easily move a further step away from proper consideration of local communities. Appropriate involvement of communities is already a challenge in national decision making, much less international decision making.

2. DISCUSSION

All things considered, all is not lost, there is recognition that there is a need for international cooperation as well as consideration of individual communities and there is further recognition that achieving the ideal balance between both issues is very challenging. One significant relevant step toward achieving the right balance is borne out in Principle 1F of the Caribbean Regional Fisheries Mechanism's St George's Declaration on Conservation, Management and Sustainable Use of the Caribbean Spiny Lobster *(Panulirus argus*) adopted in 2015. This principle affirms that the interests of small-scale and subsistence fishers and their participation in the decision-making processes that affect their livelihoods, should be taken into account and promoted. The CRFM, the Western Central Atlantic Fisheries Commission of the Food and Agriculture Organization and the Organization of African Caribbean and Pacific States, among others, have increasingly valued and/or included fisher-folk organizations in their deliberations. Recognition is a major step towards resolving issues.

Whereas recognition is needed, the reality is that there are significant hurdles that lead to limited success among even the most concerted efforts to include local stakeholders in decision making processes. For example, due to cultural differences and perhaps deep-seated biases, it remains challenging to garner the opinions of women in fishing communities in many locations. Furthermore, among the various guides for engaging stakeholders, many are just minimum standards. In essence they are far from ideal.

Yet another consideration is that there may be a level of uniqueness to each fishery necessitating the balance between international issues and community consideration. This is influenced by biology (example highly migratory vs minimal movement between boundaries) and historical community use (example subsistence with few alternatives vs commercial fishing).

3. CONCLUSION

While progress has been made with attempting to assure the correct balance between international management and community or local stakeholder involvement, actually achieving the right balance can seem intractable. Even when guides, best practices and laws are strictly followed, there is still a need to depend on the personal convictions and knowledge of all people involved, including those in international, national and local organizations. By practice, with

the realization that there are shortcomings in consultation mechanisms, individuals can help to strike the right balance by simply taking time to ask themselves: "What is the right balance between international management and the involvement of fishing communities in the current situation?" or stated another way: "Did adequate consultation take place?".

LITERATURE CITED

FAO/WECAFC.2007.Report of the fifth Regional Workshop on the Assessment and Management of the Caribbean Spiny Lobster.Merida, Yucatan, Mexico, 19-29 September 2006. FAO Fisheries Report/FAO Informe de Pesca. No. 829:99

Kough, A. S., Paris, C. B., & Butler IV, M. J. (2013). Larval connectivity and the international management of fisheries. *PloS one*, *8*(6), e64970.

Silberman, J., S. Sarver, and P. Walsh. 1994. Mitochondrial DNA variation and population structure in the spiny lobster Panulirus argus. Marine Biology 120:601-608.

Silberman, J., and P. Walsh. 1994. Population genetics of the spiny lobster, Panulirus argus. BULLETIN OF MARINE SCIENCE-MIAMI- 54:1084-1084.

United Nations. Department of Economic and Social Affairs. (2023). *The Sustainable Development Goals: Report 2023*. UN.