



NDF WORKSHOP  
**WG 9 – Aquatic Invertebrates**  
**CASE STUDY 3 SUMMARY**  
*Strombus gigas*  
Country – **Colombia**  
Original language – English

## **NON-DETRIMENTAL FINDINGS FOR THE QUEEN CONCH (*STROMBUS GIGAS*) IN COLOMBIA**

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The case study reports how Colombia, the fourth queen conch exporter in the Caribbean, is addressing the NDF to define its export quotas, focusing in the situation of the San Andres, Providence and Santa Catalina archipelago which provide more than 95% of the country's production. Strategies of Honduras and Jamaica are included for comparison.

Colombia uses a combination of strategies based on fishery independent surveys conducted within seven of the ten atolls comprising this archipelago to incorporate the stock spatial variability across eight benthic strata, thus clearly defining the potential extraction of conch wild populations. Fishery dependent data was also used to complement field data and be able to determine the fishery Maximum Sustainable Yield (MSY).

Currently, fishing is allowed in two atolls: Serrana a highly productive bank, and Roncador, a small and the eastern-most bank. In Serrana from the 130 mt defined as the MSY, the Total Allowable Catch (TAC) was set at 107 mt, discounting 18% for illegal fishing and uncertainties. In Roncador a more restrictive approach was followed, with only 10% of the 79.8 mt calculated for the MSY being defined as the TAC. It is expected that restriction in Roncador will benefit the queen conch fishery in the whole region by protecting the larval long-distance dispersal due to the dominance of the westerly current flow. Illegal captures were extrapolated from three illegal vessels captured in Colombian waters and interviews with experienced captains. Illegal fishery is targeting spiny lobster and queen conch may represent from 2 to 14% or 1.4 to 21.8 mt of clean meat.

Additional precautionary measures included the adoption of a new and more participative decision-making in fisheries management seeking the overall reduction of the fishing effort. Colombia also began discussion and agreements for the queen conch pearl trade, being the first country within the region to address NDF for this export product. The success of this study case lays perhaps in the wide stakeholder agreements oriented to species conservation policies and the

broad educational and outreach activities involving industrial and artisanal fishermen, teachers, students, politicians and general public.

Because of the reproductive strategies of this species, management in adjacent countries can enhance or undermine the efforts of their neighbors. For this reason, Colombia has also reached out to other neighboring countries to ensure international collaborative management and to promote ways to improve communication and information exchange mechanisms. The mechanisms for making NDFs in the queen conch fishery in Colombia is compared with Jamaica and Honduras and specific recommendations are offered aimed at overcome difficulties dealing with the population stability, the conch meat and the conch pearls, that can be adopted by the countries in the southwestern Caribbean.