

Food Security, Marine Conservation and Dietary Health of the Small Scale Fishers of Belize

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Fisheries throughout the world are over-exploited through unsustainable fishing practices and face additional stresses from pollution and climate change. Millions of people are dependent on fisheries for food and income; this holds especially true for those in less economically developed equatorial coastal regions. Belize is considered a leader in expanding conservation regulations towards stabilizing marine ecosystems. However, there is insufficient data on the impacts of these regulations on stabilizing food security in this region. Through interviews with NGO workers, government officials, and fishers, perceptions of current conservation and fisheries management techniques in the Port Honduras Marine Reserve (PHMR) were collected to investigate the degree of their success. Furthermore, health surveys were collected in towns adjacent to PHMR to measure food consumption patterns and fish dependency for micronutrients. It was found that while all households had acceptable diets and nutrient intake, many families are being affected by the rising prices of fish costs. If prices continue to rise, food consumption behavior is more likely to change, especially those in poverty, and contribute to a decrease in micronutrient intake. Understanding the connection between food security and fisheries management practices is the next step in adopting management protocols that will benefit marine conservation and human well-being, as well as highlight areas where the two are incongruous. This study will help explain similar issues in other coastal communities, perhaps limited to those that use the Mesoamerican Reef for harvesting. This research provides an immediate opportunity to have large-scale policy influence on marine conservation in a critically important marine biodiversity hotspot.