Capturing Malagasy fisher communities non-market economic values using mixed methods

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Abstract

Understanding how people value ecosystem goods and services can provide important information to managers and planners. Marine protected area valuations often focus on marketed goods and services. For many traditional fisherfolk, however, non-marketed ecosystem services are critically important inputs to their wellbeing. Using discrete choice experiments (DCEs), we quantify the values that Vezo fisherfolk of southwestern Madagascar place on three non-marketed services: (1) the likelihood that their offspring will be able to follow their parents livelihoods as traditional fishers (bequest value); (2) increased social cooperation between villages (social capital); and (3) storm protection. The DCE was conducted in 2010 as part of a comprehensive Total Economic Valuation (TEV) of ecosystem services flowing from a community-managed marine area in southwest Madagascar. The TEV includes provisioning (fisheries, wood, shells, freshwater, medicinal plants, research, and tourism), regulating (organic waste disposal, carbon sequestration, and storm protection), and cultural ecosystem services (social capital represented by levels of intervillage cooperation and respect and intravillage conflict about marine resource use; cultural heritage represented as a bequest value; education; recreation; and spiritual). We present values for all ecosystem services measured in the valuation, along with interpretations of differences between groups and methods. We triangulate a number of the values using multiple methods, including market-based, ranking and rating, and Likert-scale rating. Despite their reputation in the academic literature as “living for each day”, we find that bequest values constitute an important portion of the total value that local Vezo fisherfolk place on the environment.