The status of the coral reefs of Zanzibar: One example of a regional predicament

Author(s)
Ron William Johnstone, Christopher A Muhando, Julius Francis

Abstract
Coral reefs are an important resource base for many coastal communities throughout the Western Indian Ocean region (WIO). With the continued growth of coastal populations and the concomitant increase in the need for marine resources, coral reefs stand at the face of overexploitation in many countries, and are being subjected to widespread degradation due to destructive fishing practices and pollution. Within this setting, the islands of Zanzibar exhibit almost all of the problems seen throughout the WIG, and so serve to exemplify some of the issues involved. Zanzibar has extensive coral reefs, which are actively used as a resource base by an increasing coastal population. At the same time, the expansion of urban areas and the development of coastal tourist facilities means that the coral reefs are coming under increasing pressure to provide even more resources than they have historically been required to deliver. At the same time, they are recipients of increasing levels of pollutants from expanding human populations, and they are subject to a range of physically destructive activities. In general terms, the reefs of Zanzibar are in comparatively good condition although there are clear areas of significant perturbation adjacent to certain urban areas and areas of high visitation. The main anthropogenic threats to the coral reefs of Zanzibar include overexploitation, destructive activities (fishing and anchor damage), and pollution. There are indications that overfishing of key species may be leading to a decline in certain economic species as well as ecological shifts in the benthic communities of some reef areas. As is often the case regionally, the lack of historical data limits attempts to resolve the true impact of some of these factors. In line with perceived local problems, a number of activities have been undertaken in Zanzibar to address specific coral-reef related issues, and these are discussed here in the light of the larger regional setting. Some discussion is also centered around the basic issues that undermine the sustainable management of coral reefs in Zanzibar, and how these problems are being dealt with in other parts of the WIO.