

Restored Mangrove Area Creates Environmental Awareness

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Mangroves are ecosystems of great importance for wildlife and communities. Many wild species use these areas for breeding and feeding while fishermen and crab hunters explore their resources for their livelihood. In the State of Rio de Janeiro, Brazil, most of the mangroves have suffered a direct impact from urban growth. Large areas of mangrove still exist around Guanabara Bay, but these are constantly affected by the development of large cities in their surroundings. In the year 2000, a large oil spill in the Guanabara Bay caused serious losses for the fauna and flora in the mangroves and thousands of fishermen were forced to interrupt their activities. In the same year, a project was launched to recover the already degraded mangrove areas of the Guanabara Bay in Maui beach (Praia de Maui), Mag-RJ. The environmental foundation OndAzul created the Mangue Vivo ("Living Mangrove") project, which has recovered a total of 12.9 hectares of mangroves in the area. In the restoration project work was done by the fishermen who had their fishing activities paralyzed because of the oil spill. Alongside the restoration project, environmental education activities were started for the fishermen and in schools in the region.

To understand the impact of the mangrove restoration on the population, we conducted a study in the area interviewing fishermen and others living and working in the surroundings of the coastal community of Maui beach. We conducted 41 interviews with residents, which were divided in two groups: Group 1 composed by the residents whose livelihood depend on the mangrove such as crab hunters and fishermen, and group 2 composed by residents who had no direct connection to the mangrove. All interviews were anonymous with open and closed questions, where the latter included the observations of the respondents about the mangrove's importance, perception of recent changes in the environment and other aspects related to the restoration project. Group 1 demonstrated high comprehension about the mangrove's importance, but mostly linked with the economic aspect. While in group 2, the majority recognized the benefits of restored mangroves for the fishing community, but also, for the environmental aspects. The environmental education activities of the Mangue Vivo project, especially in schools, also contributed greatly to the perception of respondents. The direct involvement of the community in the restoration seems to have played a key role in the awareness process as many fishermen worked in the reforestation and became emotionally attached to the project and the mangrove area. Although mangrove areas are usually unwanted in urban centers due to its characteristic appearance and smell, it is believed that the project led to a greater awareness of the population about the importance of this ecosystem, both its environmental and social aspects.