

Recycling, mangrove recovery and community outreach 2014 report



I. INTRODUCTION

Projects Abroad Fiji has been engaged in the protection of elasmobranchs and their habitat around the Pacific Harbour region including the Beqa lagoon for a year now. Numerous species of sharks and rays are living on the reefs of the lagoon, but for many of them life begins among the roots and leaves of the mangrove trees. Furthermore, in most tropical ecosystems such as Fijian lagoons, the health of the reefs is related to and depends on the quality of the mangrove forests boarding the coast. Not only do the mangroves provide a natural filter against pollutants and sediments from the land (1), they also bring nutrients (2) and are nurseries (3) for creatures along the food chain. Moreover, local villages rely on these mangroves either for the commercial species growing there or for the protection they provide against storms and erosion (4). Those ecosystem services are reviewed in the graph below (Fig. 1).

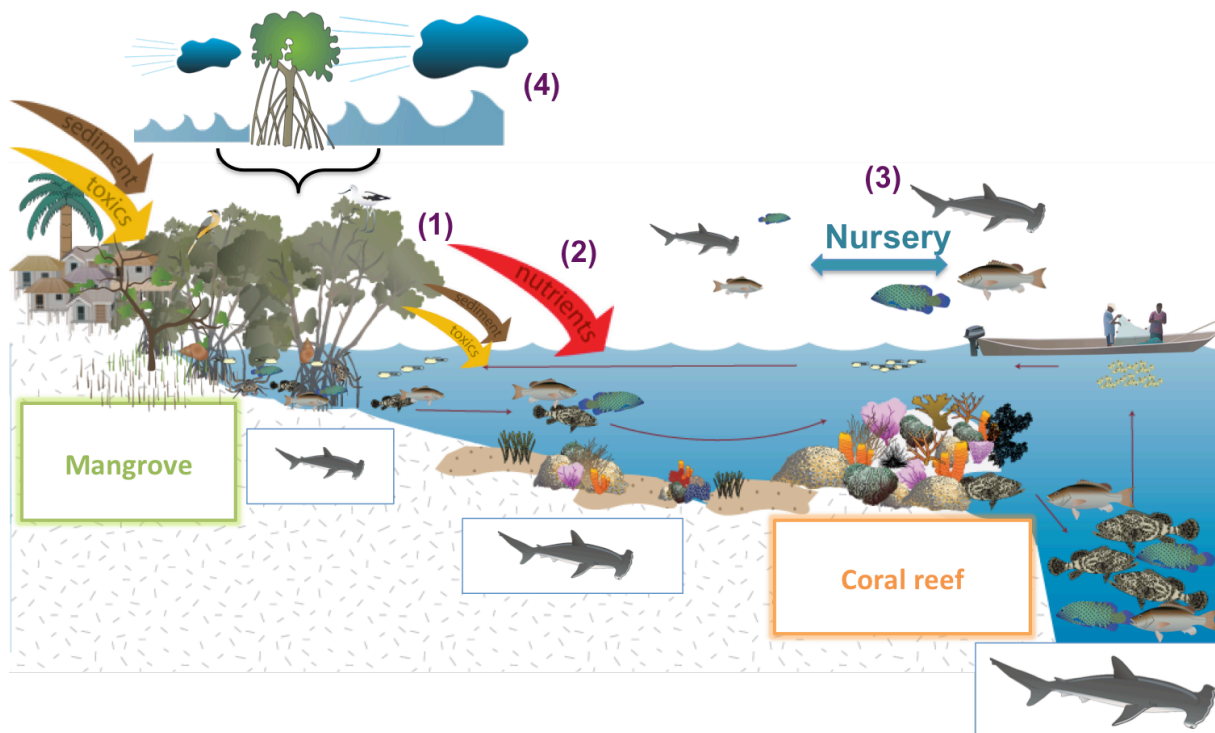


Figure 1: Ecosystem services provided by the mangrove forests (Gauthier Mescam – IAN Library <http://ian.umces.edu>)

For these reasons, Projects Abroad's team and volunteers from all over the world have taken this year on three different initiatives for the conservation and recovery of the reefs and mangrove forests: A recycling program with a short-term effect, a mangrove-planting program with a medium-term effect, and finally an educational program with an expected long-term effect.

II. RECYCLING PROGRAM



Projects Abroad – Fiji shark conservation program has organized a local recycling initiative. The volunteers have gathered and sorted their own waste, have participated in massive beach clean up and have collected plastic bottles from a local village. The villagers were paid for each bottle returned, so the program created a reason for them to contribute. More than 30 000 plastic bottles have been collected in a year. The origin of 53% of them could be found and recorded (Fig. 2). Some of the plastic bottles were reused as pots in mangrove nurseries, organic wastes were composted and soft plastic wrappers were packed into milk cartons turning them into building bricks. For 2015, the initiative continues and hopes to expand. The program expects to collaborate with an organisation that would recycle and transform strong plastic wrappers into durable handbags. Furthermore, a discussion is pending between Projects Abroad, World Wildlife Fund, and The Coca-Cola Company to make them take responsibilities and raise funding to expand the program.

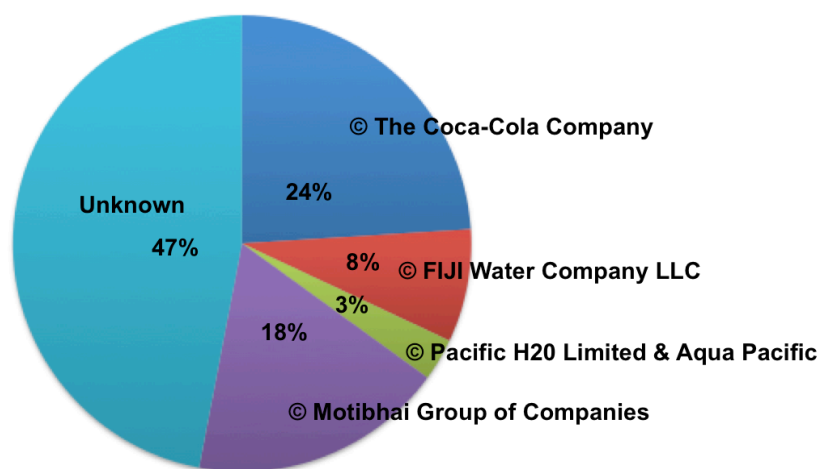


Figure 2: The most frequently collected plastic bottles and their company of origin collected in 2014.

III. MANGROVE RECOVERY PROGRAM



Around 240 volunteers have given their energy to build and take care of four plant nurseries in the area: one in Projects Abroad's backyard, one in a nearby resort, one in a village, and one in a school. The nurseries all together now have a capacity of about 7700 mangrove propagules (*Rhizophora*) that are planted after three months of growth. This initiative, supported by Mangrove for Fiji (Beqa Adventure Diver), has already helped to plant around 50 000 mangrove propagules around the Pacific Harbour region (Fig. 3).



Figure 3: Mangrove planting area in Pacific Harbour region (Gauthier Mescam – Power Point)

Expectations for 2015 are to increasingly involve the local community in the project, enlarge the planted surface and perform an assessment of the former plantation sites to evaluate the success rate, calculate the germination ratio and enhance it by improving the quality of nurseries, and finally to increase the total capacity of the nurseries.

IV. COMMUNITY OUTREACH PROGRAM



Projects Abroad has always believed and focused on informing the public and local communities as well as educating youth. The volunteers in Fiji, accompanied by the staff, have participated in dialogues with the local community and have educated children about the importance of the resources around them. During this year, they visited regularly two pre-schools, two elementary schools and two villages raising awareness concerning the environment. This program is continuing and hopes to increase the number of schools and villages it can access. Also, it will improve the quality of the education by organizing specific modules for each class with lessons, activities, and games adapted to each age range and carefully prepared by the volunteers. A blog is also being created, where volunteers will have to communicate about local issues.