

# THE UNIQUE WORLD OF MANGROVES

*Hamdhoon Mohamed*

Mangroves are trees or shrubs which grow in saline coastal habitats. These plants are also found in mangrove swamps. They act as a natural barrier against the coastal erosion, during hurricanes and tsunami. It is also helps in the maintenance of water quality by stabilizing the bottom sediments of beach. Mangroves can harbor lots of organisms such as algae, barnacles, oysters and sponges in mesh of their roots. In this article I would like to focus on the biology of mangroves and their contribution to our environment.



There are 110 species of Mangroves found in the world. Mangroves have a unique way of respiration. In some species gaseous exchange is done by the means of lenticels found on their barks. Other breathes through “pneumatophores” (also known as breathing tube) which is root like structure. Breathing tubes erect out of water in submerged mangroves.

The roots and shoots are highly specialized to live in high salt concentration. Roots are impermeable due to “suberin” accumulation. Shoots store salt in the cell vacuoles and some species directly excrete salt. The leaves are oriented in a manner to reduce water loss during sunny days. Mangroves store gases in their roots. There are 13 species of Mangrove found in Maldives. Mangroves help our environment in many ways. Apart from fighting against coastal erosion, mangroves filter out slit, nutrients and sand which otherwise will go out to the reef. These filtrates may suffocate coral and encourage algal growth. Meshes of roots are habitat to many aquatic organisms and hence contribute to food chain. Mangroves take up more carbon dioxide per unit area than most plants.

So next time when you hear about beach erosion please remember about these plants. It is essential to conserve the habitat of these matchless plants.