Coastal dunes on the Atlantico department, Caribbean of Colombia. Implications for its management

Julian Castro Barros, Adriana Gracia C., and Nelson Rangel-Buitrago
Universidad del Atlantico, Basic Sciences, Colombia

Coastal Dunes systems have own intrinsic values and provide a range of goods and services, including the protection of tangible assets located on the coast that can be affected by erosion. Coastal Dunes also act as repositories of biodiversity that have their exclusive habitat in this ecosystem. The presence of unique plant communities and landforms gives as plus an aesthetic value that can be exploited. Unfortunately, susceptibility in this systems is high, and these are particularly vulnerable in areas where urbanistic processes are developed. Currently, the 72 km of Atlantico Department Coastline (Caribbean of Colombia) is facing a severe urbanistic process that are endangering the little-known coastal dune systems. This work describes and assesses for the first time the eight dune systems located along the study area to determine their prospects under current development conditions. This kind of information is necessary to identify, improve and, conserve coastal dune together with the contribution that they make to the environmental, social and economic, well-being of local communities. Results presented are beneficial to regional or national coastal managers and planners, who need coastal inventories based on ascertained facts to adopt sound management decisions.