

CASE STUDY

An Innovative System for Protecting Mangrove

Concessions Serve as a Tool for Conserving Mangroves



Photo: USAID/Tom Rhodes

In exchange for being awarded the right to use mangroves, crabbers take on responsibilities for protecting them under a 10 year concession with the Ministry of Environment.

A new environmental monitoring and enforcement communications system covers 60,000 hectares of the Gulf of Guayaquil to help protect mangroves, the habitat for red crabs - the main source of income for local communities

CHALLENGE Mangroves serve as a natural barrier, protecting inland communities and resources from natural disasters and provide a habitat for red crabs – the primary source of income to surrounding communities. They are at risk to deforestation, overfishing, and other harmful activities, which can be difficult to control. Given their environmental and economic importance, the Ministry of Environment (MAE for its Spanish acronym) developed a mechanism for local crabbing communities to play a key role in their conservation. The MAE began awarding mangrove concessions in 1999, giving communities exclusive rights to their use for ten years in exchange for taking on a series of commitments to help protect them.

INITIATIVE The USAID Sustainable Forests and Coasts project, together with the MAE, supports mangrove concessionaires in fulfilling their commitments to protect mangroves, which includes implementing management plans that guarantee reasonable crab extraction. In addition, the project developed a comprehensive Monitoring and Enforcement System to help concessionaires throughout the Gulf of Guayaquil control activities affecting mangroves, such as deforestation. The system includes an innovative communication network that uses marine radio frequencies, which for the first time provides a venue for notifying authorities of infractions or offenders. Simultaneously, the project, together with other entities (MAE, WildAid, and USAID) provided equipment needed to implement the system (radios, motors, boat, antennas, and life vests). In addition, the project assists other crabbing organizations obtain mangrove concessions for the first time and also helps create new commercial linkages for crab meat sales.

RESULTS Crabber organizations are managing over 25,000 hectares of mangrove concessions and are implementing the Monitoring and Enforcement System that covers more than 60,000 hectares in the inner Gulf of Guayaquil. To this end, they are protecting the red crab population that more than 900 families depend on. In addition, the project has created new commercial linkages for crab pulp sales, more than doubling the price received per pound (from \$4 to more than \$9).