

## Abstract

Mangrove degradation threatens the capacity of these important ecosystems to provide goods and services that contribute to human wellbeing. This study uses a deliberative choice experiment to value non-market mangrove ecosystem services (ES) at Mida Creek, Kenya. The attributes assessed include “shoreline erosion protection”, “biodiversity richness and abundance”, “nursery and breeding ground for fish”, and “education and research”. Unpaid labour (volunteer time) for mangroves conservation was used as the payment mechanism to estimate willingness to pay (WTP). Results suggest that respondents were willing to volunteer: 5.82 h/month for preserving the mangrove nursery and breeding ground functions to gain an additional metric ton of fish; 21.16 h/month for increasing biodiversity richness and abundance; 10.81 h/month for reducing shoreline erosion by 1 m over 25 years; and 0.14 h/month for gaining 100 student/researcher visits/month. The estimation of WTP for mangrove ES provides valuable insights into the awareness of local communities about the contribution of mangrove forests to ES delivery. This knowledge could assist decision-making for the management and conservation of mangroves in Mida Creek and its environs.