## Estimating the Physical, Real and Permissible Carrying Capacity of Recreational Boating for Mangrove Forests of Hara-e Rode Gaz International Wetland

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## **Abstract**

In this study, the physical carrying capacity, real carrying capacity and permissible carrying capacity of recreational boating for mangrove forests of Hara-e Rode Gaz international wetland has been estimated. This area has a unique mangrove ecosystem. Unfortunately, an increasing number of visitors to the protected areas, apart from economic benefits, have created many problems and environmental damages, so the need for effective management of tourism in protected areas will be felt more than ever. One of the best solutions for preventing and reducing problems in protected areas is estimating the carrying capacity. In this paper, the carrying capacity of recreational boating for Mangrove forests of Hara-e Rode Gaz international wetland has been estimated. For estimating the physical carrying capacity (PCC), the wetland area and the required area for each boat was used and physical carrying capacity was estimated using existing formula. For estimating the real carrying capacity (RCC), the corrective factors (Cf) include very hot days, stormy and rainy days and season of birds breeding have been applied to the PCC. Finally, for estimating the permissible carrying capacity, Infrastructure Capacity and management capacity were estimated and applied to the RCC. Results showed that the physical carrying capacity is 380 boat/day, real carrying capacity is 166 boat/day and Effective or Permissible Carrying Capacity is 41 boat/day.

Keywords: Mangrove forests, Hara-e Rode Gaz International Wetland, Carrying Capacity, Real Carrying Capacity, Coastal tourism.