SMART, a new and promising enforcement tool implemented in the LMMAs network and MPAs in Madagascar

T. Tantely, R. Laza
Wildlife Conservation Society, Madagascar
Wildlife Conservation Society, Madagascar
ttianariisoa@wcs.org

In Madagascar, 87% of coral reefs are threatened by human activities, especially due to unsustainable fishing leading to a dramatic decrease in coastal and marine resources those last decades. Destructive fishing practices such as beach seines, poison, turning coral blocks, diving fishers etc. remain despite increasing enforcement. In order to increase the efficiency of law enforcement in coastal and marine ecosystem, new tools are being developed aiming at facilitating offenses data collection and data analysis with limited financial and staffing resources. To this aim, WCS is implementing the Spatial Monitoring and Reporting Tool software (SMART) in three marine seascapes in Madagascar. On behalf of the Government of Madagascar and in collaboration with local communities, WCS has assisted in the creation, and management of four Marine Protected Areas (MPAs) and 28 Locally Managed Marine Areas (LMMAs) in the southwest, northwest and northeast of Madagascar for the last two decades. Yet controlling and monitoring compliance remains one of the greatest challenges in the management of marine resources in Madagascar. To this aim, Monitoring and Control Committees (CCS) have been created and are an integrated structure within each LMMA management associations to ensure efficient surveillance and law enforcement in collaboration Government institutions and local authorities so that existing legal texts such as dinas are respected. CCS members have been trained on SMART software to support collection and analysis of real-time threats data, and optimize planning of enforcement patrols using cybertrackers. Compliance data are transmitted monthly to the SMART focal point to be analysed. Reports and compliance maps are produced to evaluate (i) the performance of patrols; (ii) the localization, number, frequency and seriousness of offenses; (iii) the number, origin of offenders. This innovative tool provides managers, coastal communities and authorities the ability to quantitatively assess offences and to adjust management strategies toward conservation success.