MAHAVAVY-KINKONY COMPLEX

SPOTLIGHT

"Over a 250,000 ha of different habitats, form the Mahavavy-Kinkony Complex. However, the area faces a variety of threats. New data are crucial for conservation action planning in this area."

| Shrum and Donati, 2013 [1] |

WETLAND HABITAT MAPPING PRODUCTS

Status Mapping | 2016



Description: Two Sentinel-2 satellite images acquired on 7th August 2016 (a), and 25th November 2016 (b), rendered as false-color composite images. The combination of these two Sentinel-2 images was employed to represent the images of wet and dry seasons for mapping the status of land cover/use in and around the Mahavavy-Kinkony Complex in 2016 (c).

FAST FACTS

- The Mahavavy-Kinkony Complex, located to the Northwest of Madagascar, is a complex of dry deciduous forests and wetlands, and covers an area of approximately 258,900 ha.
- The site takes its name from a combination of Lake Kinkony, Madagascar's second biggest lake, and the River Mahavavy, which flows through to reach the sea via a large delta. It is one of the biggest wetlands complex in Madagascar
- The site covers a range of habitats, from mudflats, mangroves and dry forests to freshwater lakes, marshes and grasslands, and even caves. It was designated as a permanent protected area in 2015.
- The Mahavavy-Kinkony Complex is classfied as IUCN Category V (Protected Landscape/Seascape) protected area.
- The Lake Kinkony, a permanent freshwater lake, covers a surface of 13 800 ha. It was designated as a Ramsar Site in 2012 ^[2].
- The Mahavavy-Kinkony Complex is home to a truly unique flora and fauna with an incredible variety of species that can only be found there, including the Critically Endangered Madagascar fish eagle, the Endangered Sakalava rail, Madagascar heron, Madagascar pond-heron, and Madagascar sacred Ibis, as well as the well-known lemurs. Critically Endangered endemic fish are also present.



Description: Location of the Mahavavy-Kinkony Complex in Madagascar.





1990

Grassland Bare land Mud, sand or salt flats Open water Marshes Intertidal forested wetlands

Description: Historical maps of land cover/use in and around the Mahavavy-Kinkony Complex derived from Landsat imagery acquired between 1990 and 2010.



Description: The dry forests in and around the Mahavavy-Kinkony Complex has been continuously decreasing from 138,858 ha in 1990 to 116,645 ha in 2016, and approximately 20,000 ha of dry forests were lost over the last 25 years. While on the other hand, the land covered by mangrove forests in and around the Mahavavy-Kinkony Wetland Complex has remained relatively constant over the past 25 years with an area of approximately 19,000 ha.



Description: Sakalava rail (*Amaurornis olivieri*) is endemic to Madagascar. The species is found in three separated sites in the western lowland of Madagascar. The Lake Kinkony is one of the major habiats of this species. The Sakalava rail is threatened by habitat loss through conversion of wetlands for rice cultivation. It is currently listed as Endangered ^[3].



Description: Sunrise over Lake Kinkony. The Mahavavy-Kinkony Wetland Complex is one of the world's biggest birdwatching spots as all the (endemic and migratory) birds of the West of Madagasar nest there during the dry season.

References

[1] Shrum MK and Donati G (2013) Survey of Lemur diversity in Mahavavy-Kinkony Wetland Complex, North-western Madagascar.

American Journal of Physical Anthropology.150: 255-255.

[2] Lac Kinkony. Ramsar Sites Information Service. https://rsis.ramsar.org/ris/2048

[3] BirdLife International (2012) Amaurornis olivieri. IUCN Red List of Threatened Species. Version 2013.2. International Union for Conservation of Nature.

Acknowledgement and Authors

The product development and processing have been performed within the ESA project GlobWetland-Africa.

Authors: Tiejun Wang, Yiwen Sun, and Zoltan Vekerdy. Contact: <u>t.wang@utwente.nl</u>; <u>z.vekerdy@utwente.nl</u>







Historical Mapping | 1990 - 2010