

Supporting ecosystem services in African aquatic systems through development cooperation: CEBioS-related projects

Luc Janssens de Bisthoven, Anne-Julie Rochette, Katrijn Baetens, Marie-Lucie Susini Ondafe, Maarten Vanhove, Jean Hugé, Steven Van Passel, Berihun Daregot, Luc Brendonck, Ludwig Triest, Linus Munishi, Zacharie Sohou, Hans Komakech, Joël Ndayishimiye, Longin Ndayikeza, Benoit Ndizigahera+, Hamed Odountan, Moïssou Lagnika, Patrick Martin, Bruno Verbist, Maarten Wynants, Els De Keyzer



CEBioS

Who are we? – <http://cebios.naturalsciences.be>

CEBioS: 'Capacities for Biodiversity and Sustainable Development'.

- Programme of the Royal Belgian Institute of Natural Sciences (RBINS)
- Financed by the Belgian Directorate-General for Development Cooperation (DGD)
- Carries out capacity building for partners of the Belgian cooperation in the field of biodiversity conservation and sustainable management linked to poverty eradication

Projects in Benin, CEBioS + Global Taxonomy Initiative (GTI): Ocean, lagoons and wells

The GTI has supported several PhDs of Université Abomey-Calavi on the biomonitoring of macroinvertebrates of Lake Ahémé and on groundwater fauna as indicators of water quality in Benin. The GTI has funded several short-term trainings from **other African countries** on water related taxonomical issues. Furthermore, CEBioS supports IRHOB for modelling currents in the ocean and the Cotonou lagoon using the COHERENS model in order to understand erosion processes and dispersal of shrimp larvae (for aquaculture). (With the support of Bio-Bridge)



© M. Lagnika



© C. Koudenoukpo



© C. Koudenoukpo

(CEBioS, Royal Belgian Institute of Natural Sciences, Université Abomey-Calavi, Institut de Recherches Halieuthiques et Océanologiques du Bénin)

Lake Tanganyika: South Initiative and VLADOC, financed by VLIR-UOS: Lake Tanganyika, Burundi & DR Congo

The University of Burundi, together with OBPE explored the Northern and Southern parts of Lake Tanganyika shores in Burundi for biomonitoring with fish, algae, macrophytes and chemistry. 9 **master theses** were produced. Meanwhile, a VLADOC PhD is analysing the sardine genetical stocks and fisheries of the Lake in cooperation with the Centre de Recherche en Hydrobiologie of Uvira (DR Congo) and in the framework of a South Initiative. Articles and a **policy brief** are being prepared.



© L. Janssens de Bisthoven



© L. Janssens de Bisthoven

(VUB, UBU, OBPE, CRH, KULeuven, CEBioS, UHasselt)

VLIR-UOS, Short Training Initiative: building an African network for sustainable management of aquatic biological resources supported by genetics and parasitology

An intensive training was organized in **Morocco** to an international panel of train experts on parasitology and aquatic management.

(KU Leuven, IRD, CEBioS, Université Mohammed V)

VLIR-UOS, South Initiative: strengthening local capacities for better biological assessment of mining impacts in Katanga (DR Congo) on fish and their aquatic environments

The aquatic fauna was studied in aquatic systems impacted by mining in Katanga, DR Congo.

(KU Leuven, UNILU, CEBioS)

EVAMAB, financed by BELSPO: Lake Tana, Ethiopia and Lake Manyara, Tanzania

See <http://www.biodiv.be/evamab>

The project focuses on **four UNESCO Man & Biosphere (MAB) reserves**, including 2 **aquatic** lentic systems: Lake Manyara (Tanzania) & Lake Tana (Ethiopia). The consortium elicited stakeholders' perceptions about ecosystem services and their valuation and discussed possible management options. Lake Manyara: erosion-pastoralism-agriculture nexus. Lake Tana: invasive water hyacinths (policy brief produced). A **MANUAL** about ecosystem services for MAB managers is being prepared.



© A.J. Rochette



© W. Van Oijstaeijen

(CEBioS, KULeuven, UA, ULB, NM-AIST, Bahir Dar University)

Lake Manyara: North South South, financed by VLIR-UOS: Lake Manyara, Tanzania

We explored the stakeholders' perceptions of ecosystem services and management options for the Lake Manyara basin during two workshops and interviews (article in revision).



© A.J. Rochette



© A.J. Rochette

(KU Leuven, NM-AIST, University of Zimbabwe, University of Cape Town, Trias, Plymouth University and CEBioS)

Developing policy-relevant biodiversity indicators: studying trends to support sustainable fisheries

Projects in the framework of Monitoring, Reporting and Verification (MRV) are implemented with CEBioS technical and financial support to develop indicators that help monitoring the state of aquatic biodiversity and the use of non-sustainable fishing practices. The objective is to give recommendations to decision makers and fishermen for sustainable fisheries management. Involved countries are DR Congo, Tanzania and Uganda.



© D. Akonkwa

(UOB, CSB, CRH, NaFFIRI, NEMA, NMAIST, SCRID-Agri, CEBioS)

Layout: Lucie Ongena (CEBioS)