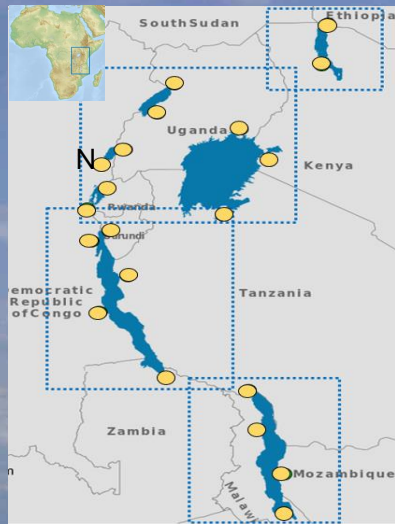


AFRICAN GREAT LAKES MONITORING



Pierre-Denis Plisnier

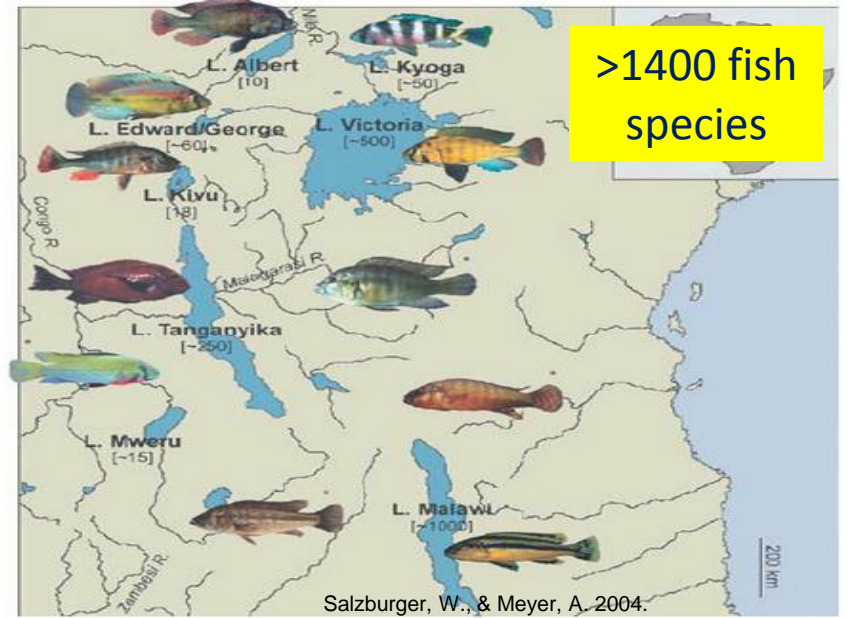
December 10th 2020

pplisnier@gmail.com

ACARE and IISD ANNUAL MEETING

AFRICAN GREAT LAKES

BIODIVERSITY



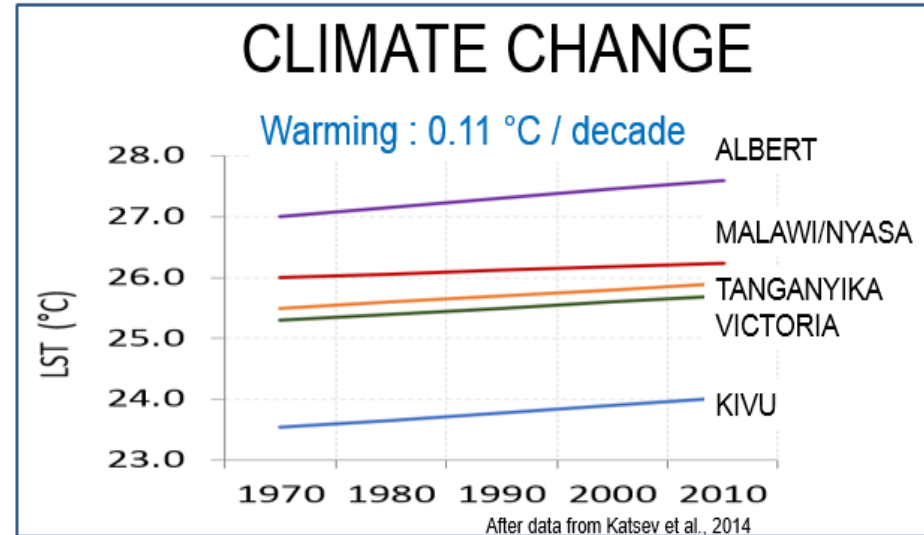
FISHERIES



WATER



THREATS

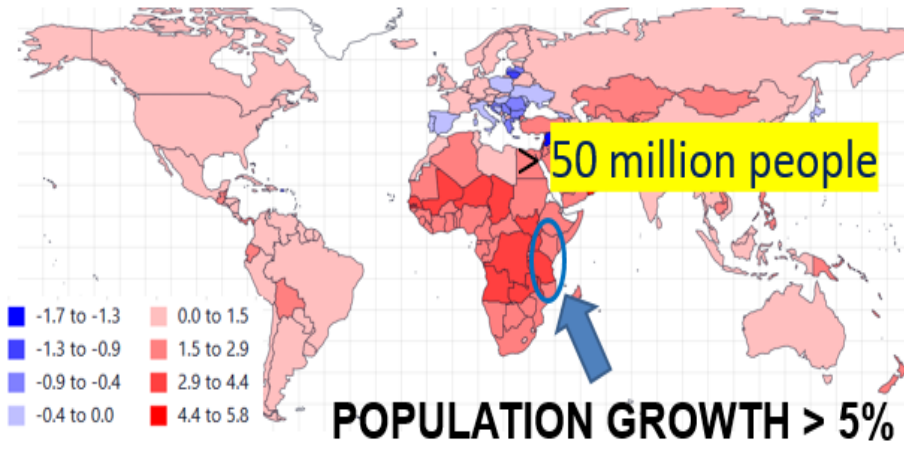


FISH CATCHES DECREASE

Overfishing ? Climate change ?



ANTHROPOGENIC PRESSURE



THREATS

ALGAL BLOOMS



POLLUTION



INVASIVE SPECIES



EROSION Sedimentation



Photo : Olivier Dewitte

DATA ARE NEEDED TO ADDRESS THREATS

-OVERFISHING



FISHERIES

-POLLUTION



**WATER
QUALITY**

-ALGAL BLOOMS

-CLIMATE CHANGE



METEOROLOGY

-INVASIVE SPECIES



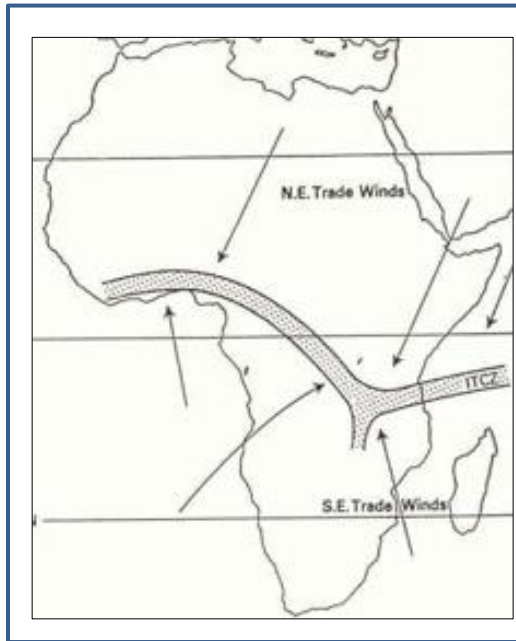
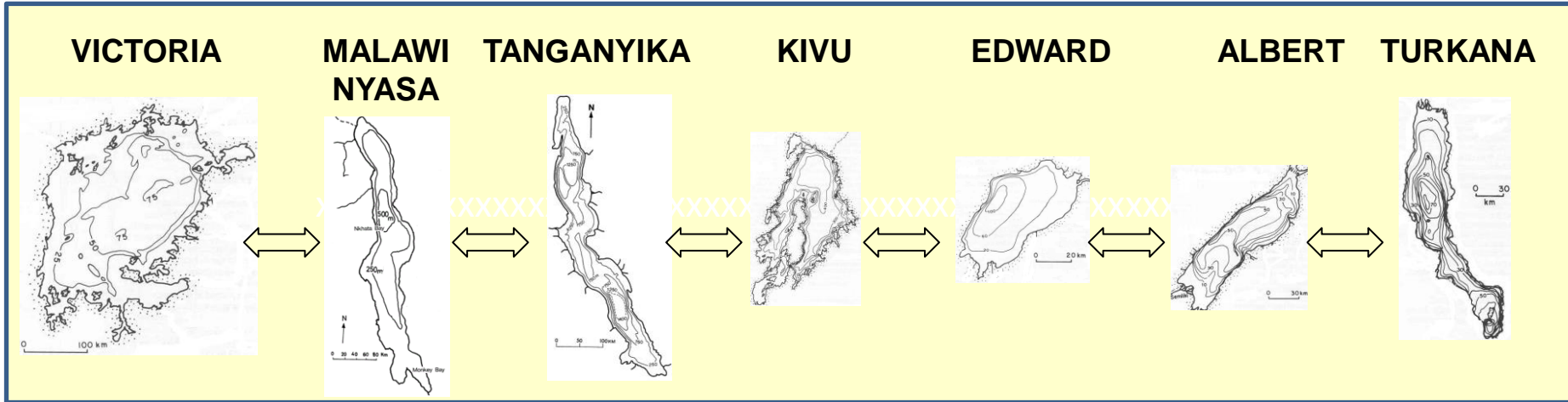
BIODIVERSITY

-EROSION



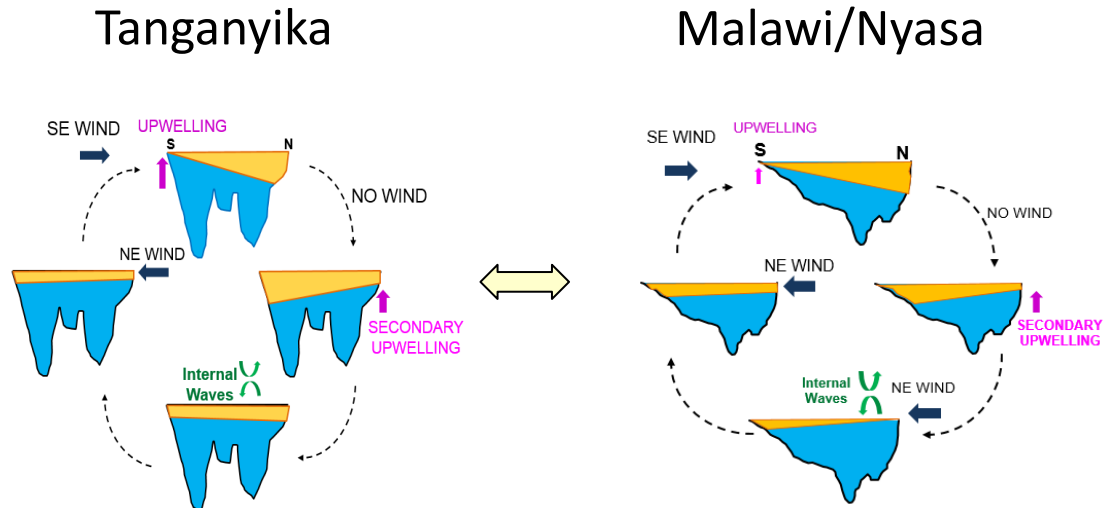
LAND USE

ADDED VALUE OF A MULTILAKE MONITORING



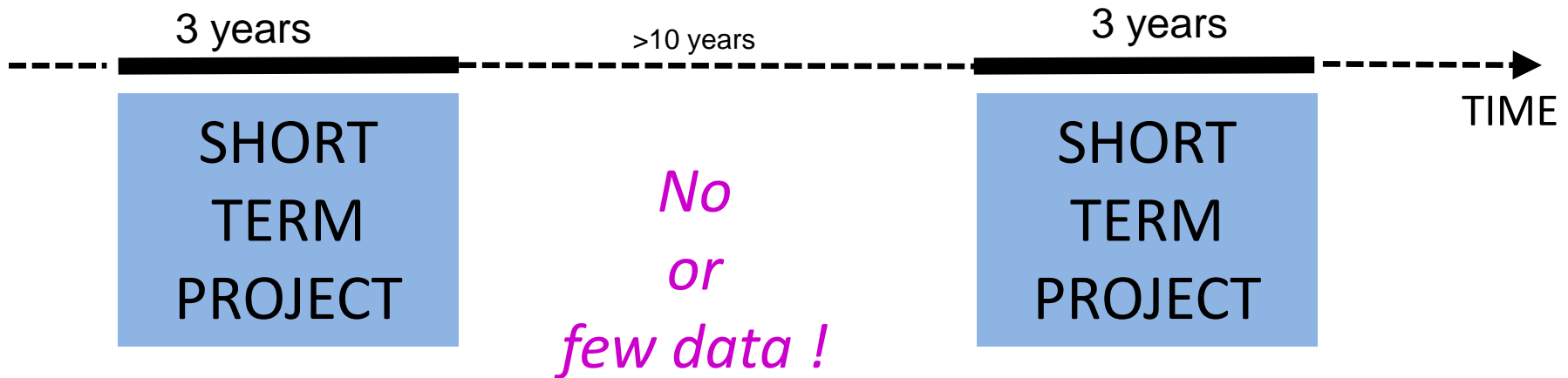
Climate variability

LIMNOLOGICAL CYCLES



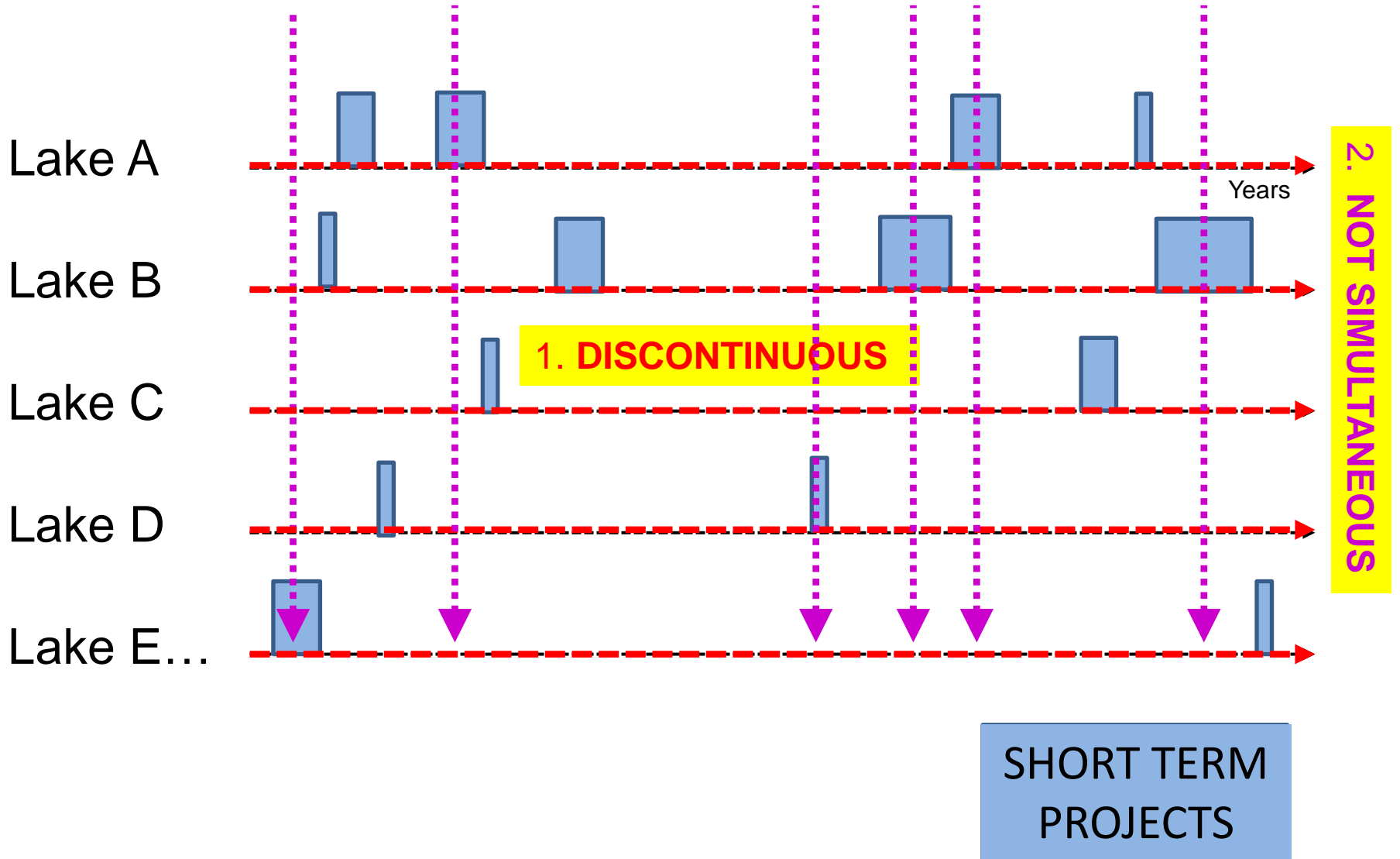
PRESENT MONITORING

DISCONTINUOUS & NO HARMONIZATION

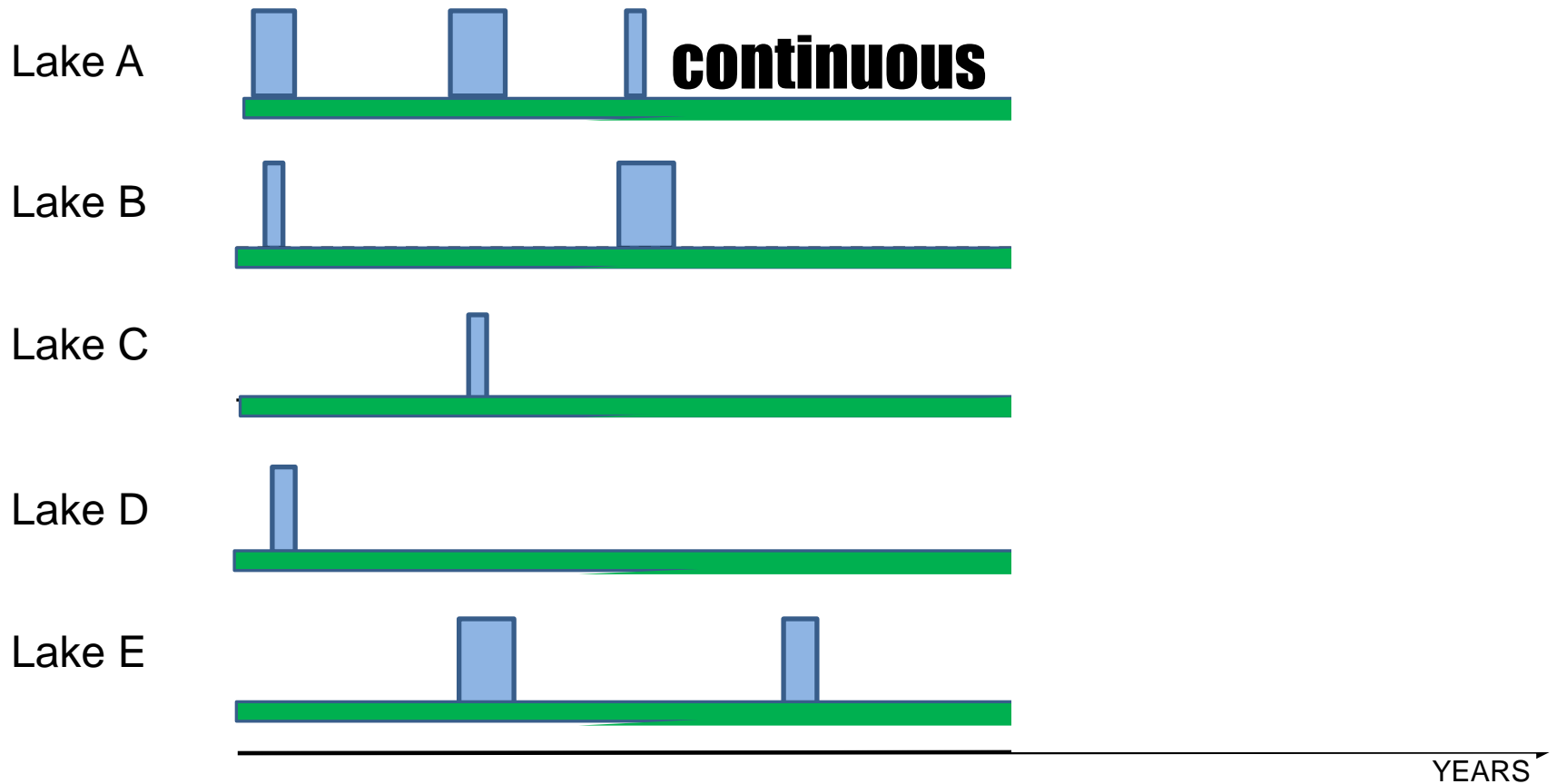


PROBLEM !

PRESENT SOURCES OF DATA



MULTI-LAKES MONITORING



**KEY
DATA**

LONG TERM
MONITORING

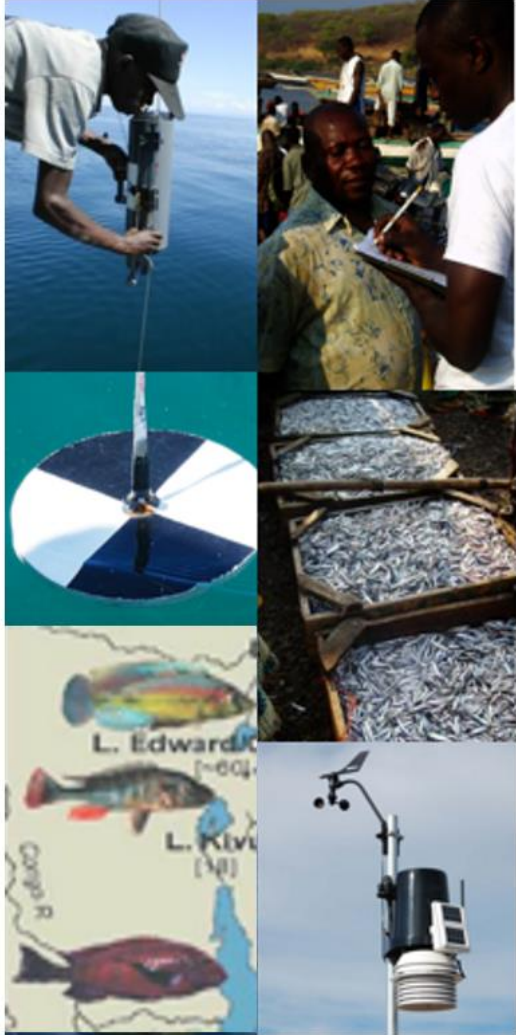
SHORT TERM
PROJECTS

2-3 years

MANY MORE
PARAMETERS

Parameters to monitor ?

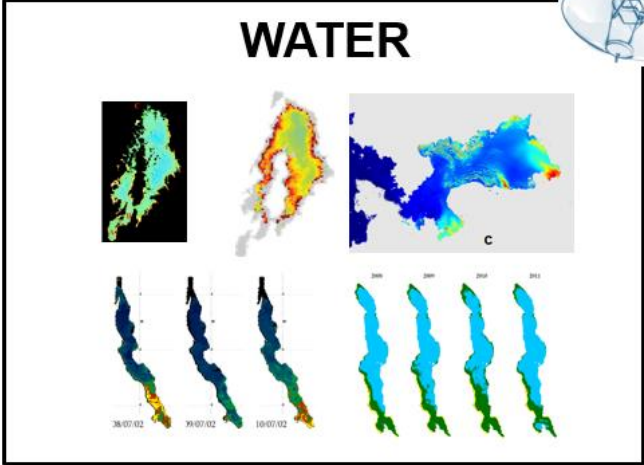
FIELD



REMOTE SENSING

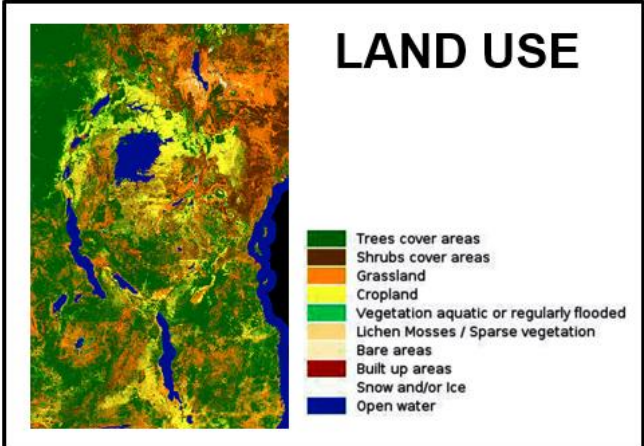


WATER

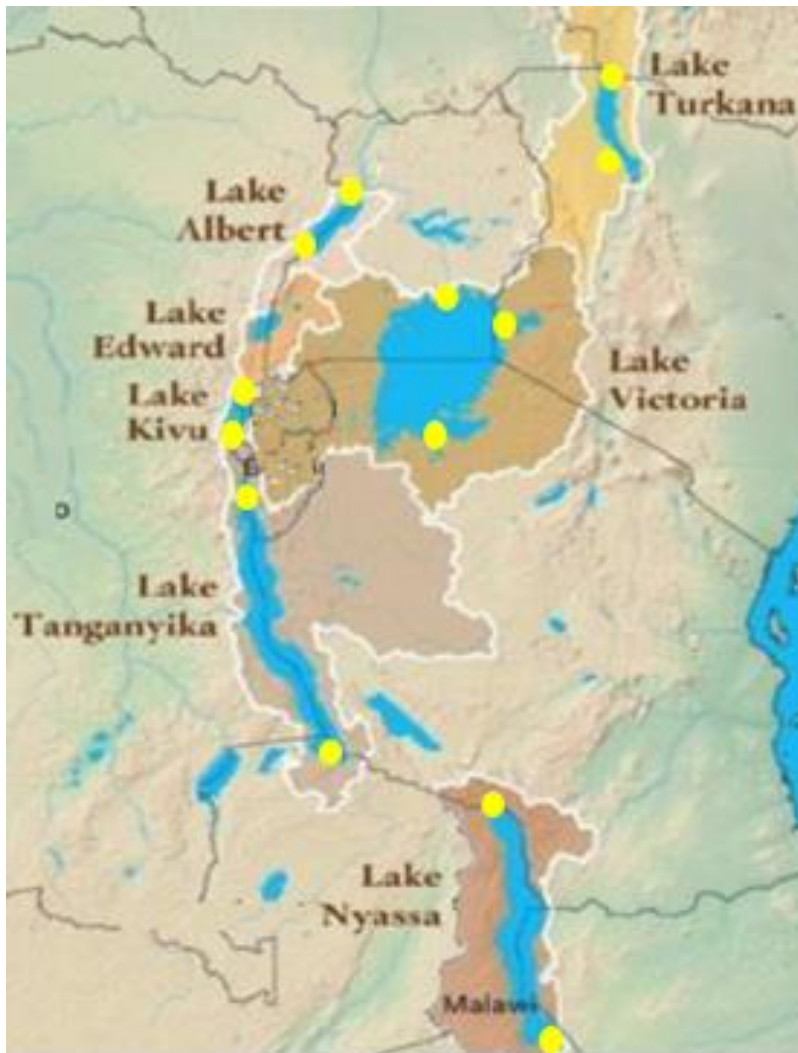


METEOROLOGY

LAND USE



AUTOMATIC BUOYS



HYDRODYNAMICS

STEPS

Institutions & people
WHO, WHAT, WHERE ?

Remote sensing + database

Institutions
capacities

Agreement

TRAINING

Monitoring

Evaluation &
adjustment

OPERATIONAL
MONITORING

1. - Water/limnology
- Fisheries
- Meteorology

2. - Biodiversity
- Land use
- Socio-economic data

AFRICAN
GREAT LAKES
LONG TERM
MONITORING

LONG TERM MONITORING and ADVISORY GROUPS

ADVISES
TRAINING, HELP ..

MONITORING

Lake Edward-Albert
Advisory Group

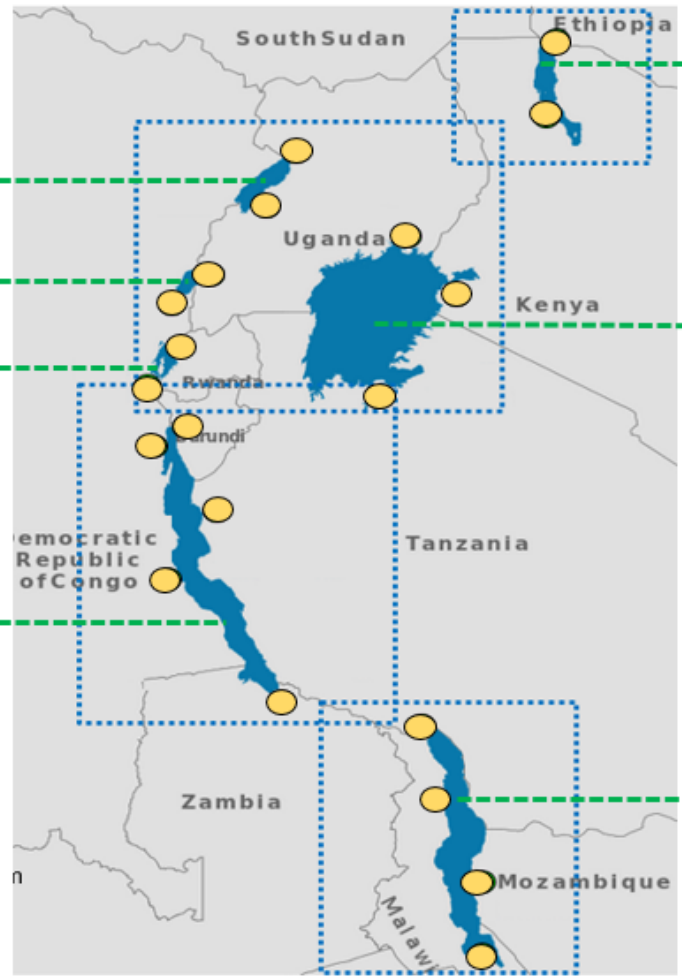
Lake Kivu
Advisory Group

Lake Tanganyika-
Science Advisory
Group

Lake Turkana
Advisory Group

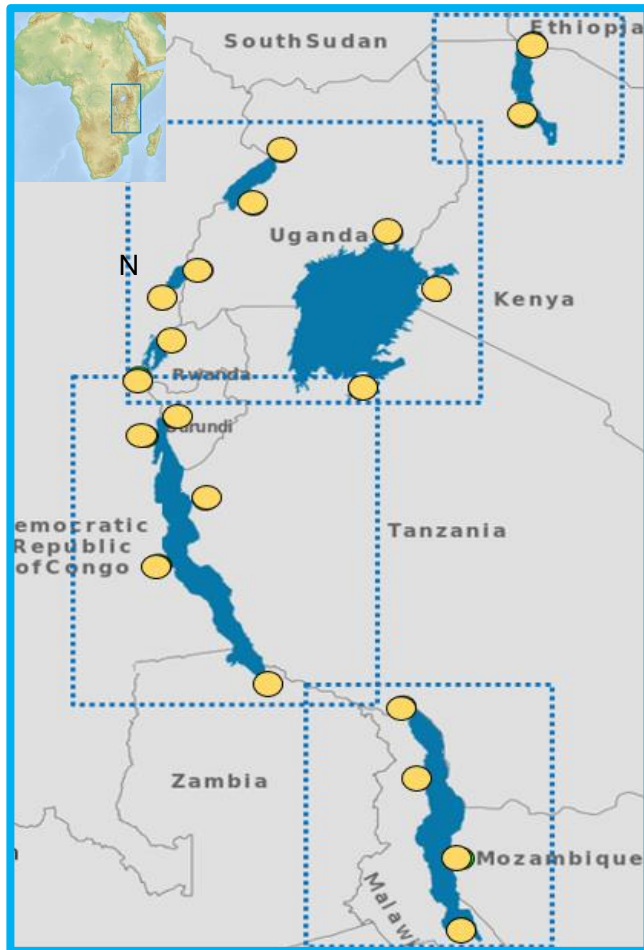
Lake Victoria
Advisory Group

Lake Malawi/Nyasa
Niassa Basin Fisheries &
Aquaculture Netwrok



AGL INSTITUTIONS

An INTERNATIONAL CONSORTIUM to support the monitoring of African Great Lakes



AGL INSTITUTIONS

Multilakes
monitoring



ACARE-IISD ?
ARCOS ?
ICRAF ?
IUCN ESARO ?
IUCN ISI ?
EAGLOnet ?
LLO ?
TNC ?
...

AGL CONSORTIUM ?

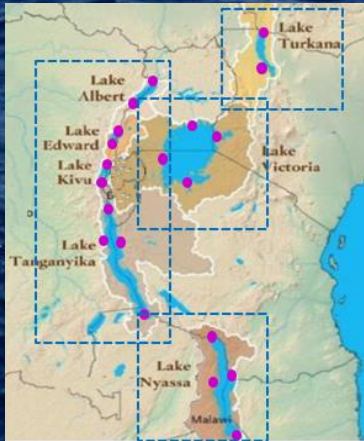
« Friends of the African Great Lakes » ?

Conclusions

WHAT COULD BE DONE WITH FUNDING ?

NEEDS

Basic instruments
Meteo station
PC/internet
Automatic buoy



20 stations

Remote sensing

DELIVERABLES

Continuous times series

- fisheries
- water quality
- biodiversity indicators
- land use/erosion
- meteorology

SCIENCES

- Data
- Ecological understanding (threats/forecasting..)

NECESSARY FOR MANAGERS

SUSTAINABLE USE
of major regional RESSOURCES
and **WORLD** heritage sites.

